

Figure 1. Plasma clearance in high LeY expressing dogs chimeric versus constant region mutant of cBR96-2.

Figure One

Figure 2

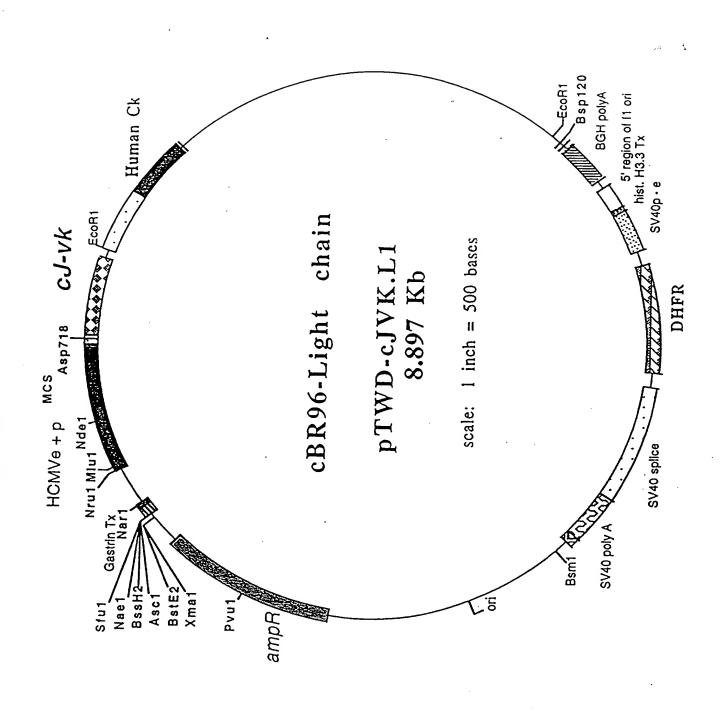


Figure 3

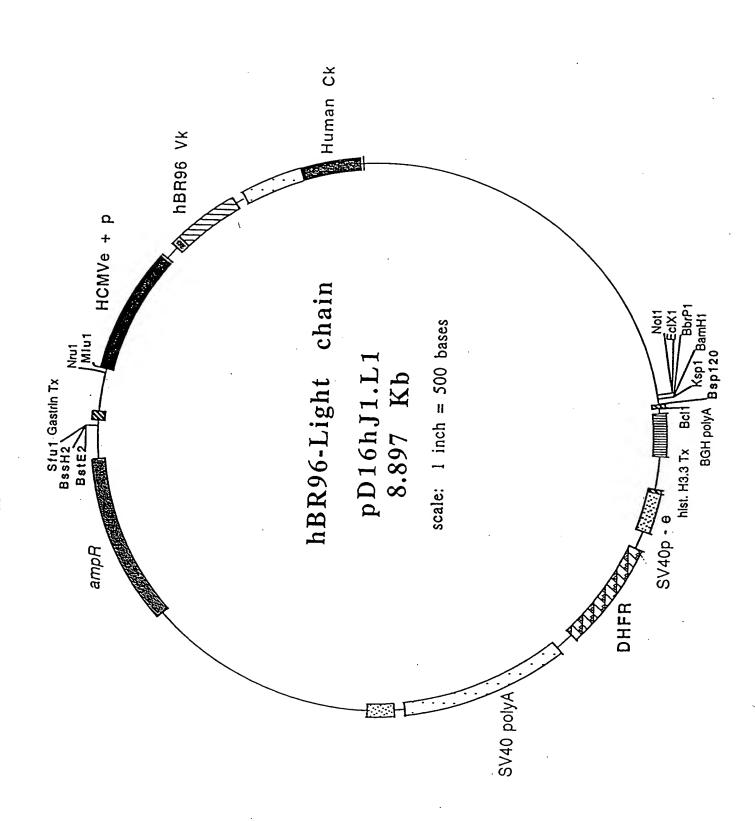


Figure 4

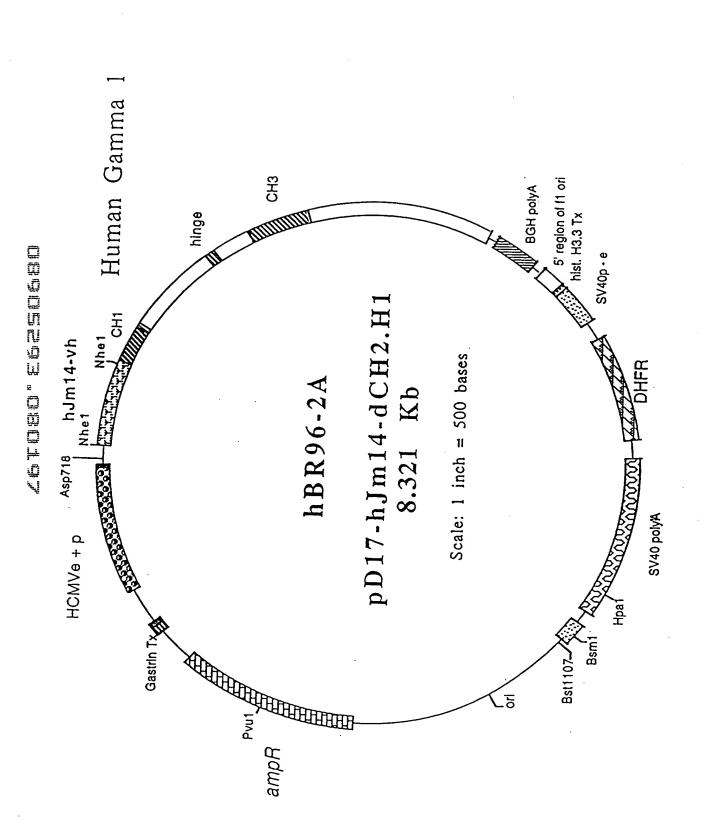


Figure 5

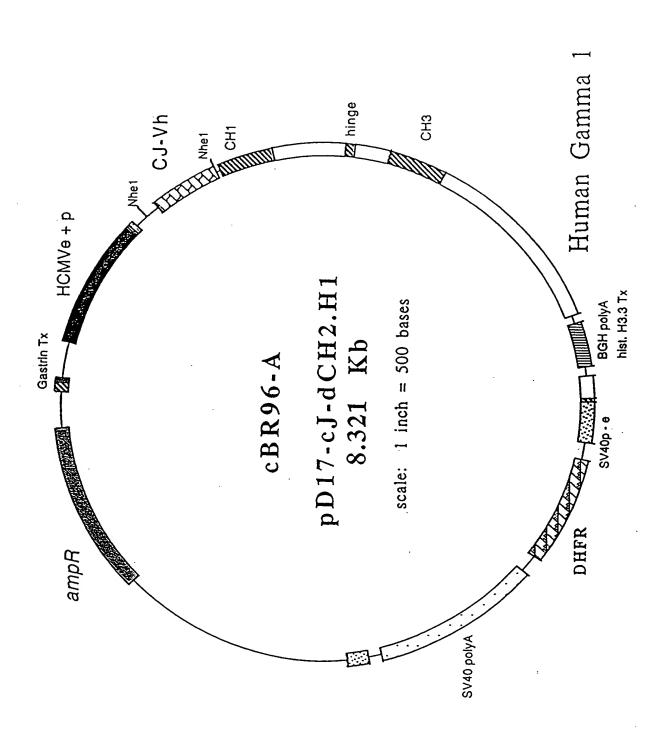


Figure 6

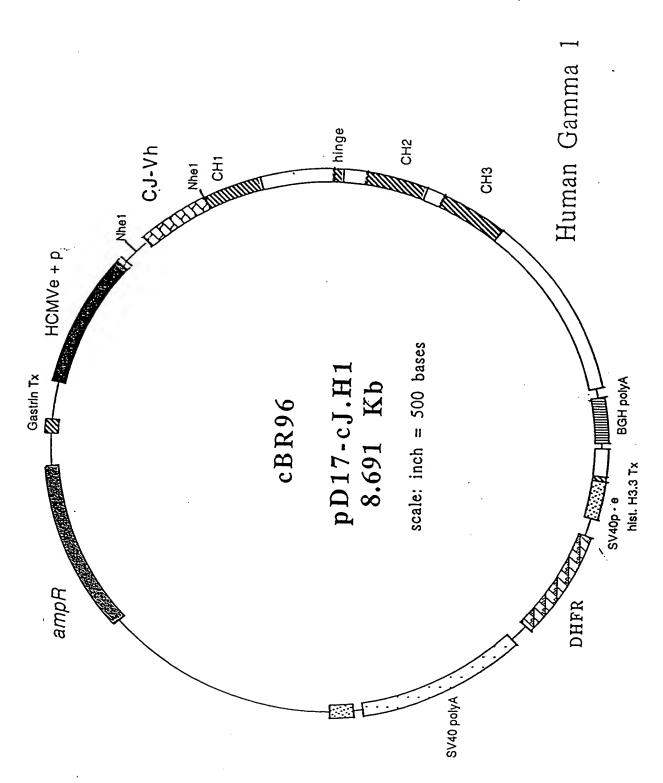


Figure 7

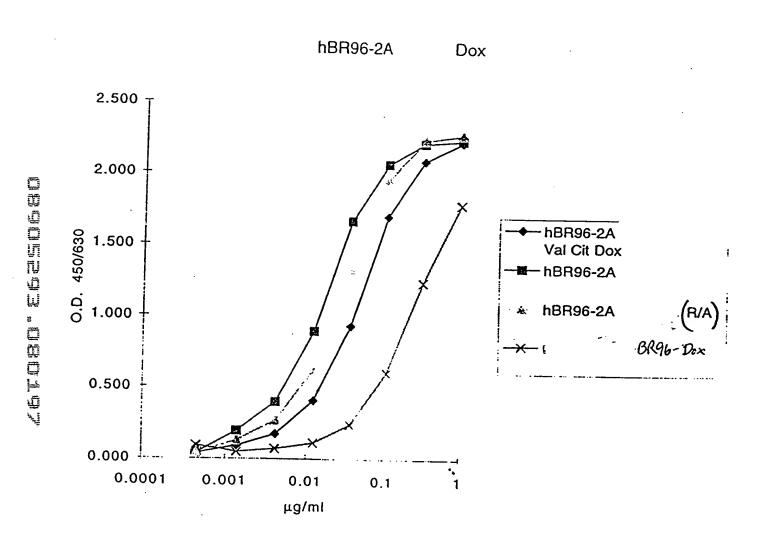
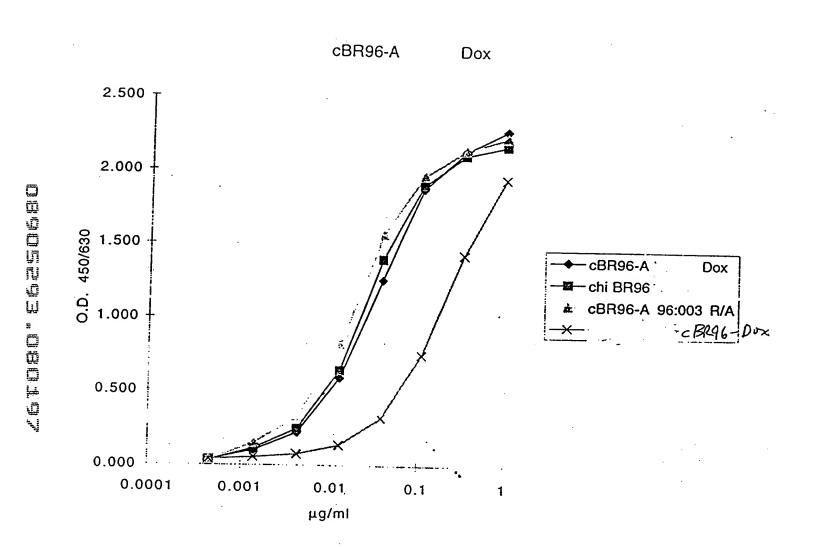
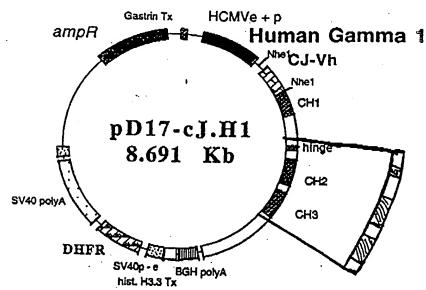


Figure 8





3. 2 - Hinge + CH3 domains amplified by PCR from L6 IgG1 construct lacking the CH2 domain.

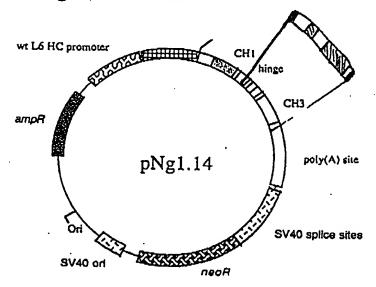


Figure 9

### #3 - Hinge +CH3 PCR fragment cloned by homologous recombination into E.co47-III site of BR96 IgG1 molecule.

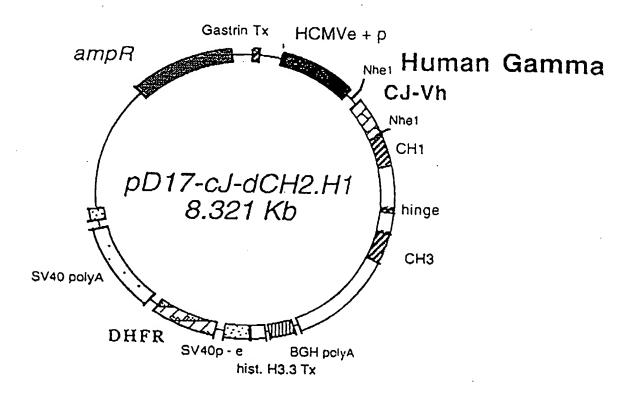
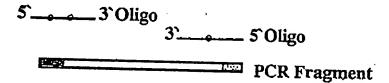
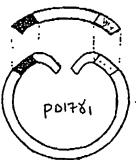


Figure 9 (CONTINUED)

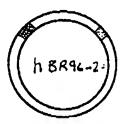
- 1- Introduction of mutations by site-directed mutagenesis on double-stranded plasmid DNA.
- A- Mutations introduced into synthetic oligonucleotides used for the PCR amplification of CH2 domain.



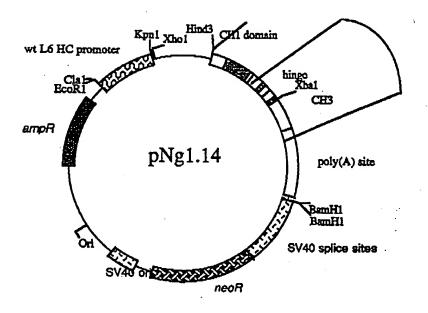
B- Plasmid DNA linearized inside CH2 domain and cotransformed with PCR fragment into competent DH5\alpha.



C- Cloning mediated by homologous recombination yields transformants harbouring recombinant plasmids.



### Figure 11



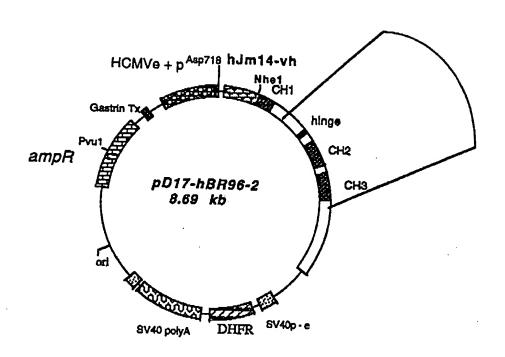


Figure 12

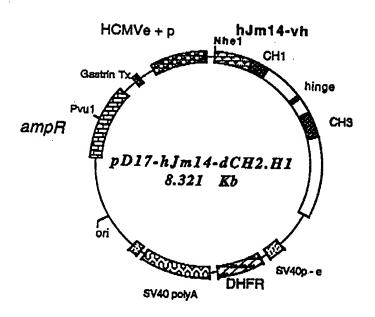


Figure 13

44

TTATTTTTT

TAATTTTATT

CCTTTTTTT

GCCAGAGTAA

GAGATCTGCT AGGTGACCTG AGGCGCGCG GCTTCGAATA CTCTAGACGA TCCACTGGAC TCCGCGCGGC CGAAGCTTAT

GACGGATCGG

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pD17-cJ-dCH2.H1

**AATAAAATAA** 

GGAAAAAAA ATTAAAATAA

### AATTGCATGA TTAACGTACT AGTTATTAAT GGCTGACCGC CCGACTGGCG AAATGGCCCG GATAACTGCA GTTACTGCCA TTTACCGGGC TACCACTACG GGGAGTTTGT CGGTGGGAGG AGCCAGTATC TCGGTCATAG TCAATAATTA ACCCACCTGA CCCTCAAACA GCCACCCTCC GCGATAATGG CGCATAGTTA GCGTATCAAT GAACTGGCTG CTTGACCGAC ATTATTGACT CAATGTATTG AATGCCATTT ACCGGGGGGA TTGACGTCAA CAATGACGGT TGACGTCAAT 260 CAACTGTAAC TAATAACTGA TGCCCGCCT AACTGCAGTT AGGTGGGGTA ACTGCAGTTA AAATGGGCGG TAGGCGTGTA TTTACCCGCC ATCCGCACAT GCTCTGATGC GTTCCGTTCC GTTGACATTG CAAGGCAAGG TTACGGTAAA GGACTTTCCA CCTGAAAGGT CTATTGACGT 340 TATTAGTCAT ATAATCAGTA 430 610 TCCACCCCAT GAGCAAAATT TAAGCTACAA CTCGTTTTAA ATTCGATGTT 150 AGTACAATCT TCATGTTAGA AGATATACGC TCTATATGCG GTTACATAAC TCCCATAGTA ACGCCAATAG AGGGTATCAT TGCGGTTATC 240 330 AGTACGCCCC TACATCTACG CCATTGACGC CTGAAAGGTT TTACAGCATT GTTGAGGCGG GGTAACTGCG TTTCCAAGTC GAGTGCCCT AAAGGTTCAG 510 TTGACGGGTG AACCGTCATG TAGTTCACAT AGTATACGGT TCATGCGGGG 9 420 8 GTCGACTCTC TGTACGGGCC ACGAAGCGCT ACATGCCCGG CGGGTATATA CCTCAAGGCG TCATATGCCA TACTTGGCAG ATGAACCGTC 410 GGAGTTCCGC ACTGCATACA AGGGTATCAT 320 680 CTCACGGGGA CAACTCCGCC 860 TCATCACGCG 130 ATCCCCTATG TAGGGGATAC AGTAGTGCGC TGACGTATGT 220 310 TGCTTCGCGA 400 GCCCATATAT ATCAAGTGTA GGGACTITICC GGGCGTGGAT AGCGGTTTGA CCCGCACCTA TCGCCAAACT GACTTTCCAA AATGTCGTAA 490 670 760 300 CGTTTTTGCGC CGATCTCCCG CTCCAGCGAC GCAAAACGCG GAGGTCGCTG ATGCCCCAGT AATCAAGTAT 210 390 TTAGTTCATA ACGICAATAA AACTGCCCAC TTGGCAGTAC TACTGGAATA ATGACCTTAT 9 750 840 AGTTTGGCGC TCAAACCGCG AGAATCTGCT TAGGGTTAGG TCTTAGACGA ATCCCAATCC 110 TTGTGTGTTG AACACACAAC TACGGGGTCA CCGCCCATTG GGCGGGTAAC TGCCCAGTAC ACGGGTCATG GTACATCAAT 380 **..AATCAACGG** TTTAGTTGCC 290 470 CATGTAGTTA TTTGAGATGG TCATTAGTTA ATTTACGGTA AAACTCTACC TGCTCCCTGC ACGAGGGACG AGTAATCAAT TAAATGCCAT CCAACGACCC CCTGGCATTA GGACCGTAAT GGTTGCTGGG TTTGGCACCA AAACCGTGGT GGTTTTGGCA CCAAAACCGT

Figure 14

## рр17-сJ-dСН2.Н1

990	1080	1170	1260	1350	1440	1530	1620	1710	1800
GAGACCCAAG	GCTTGCTAGC	TCTGGGGGAG	GTTCGCCAGA	CGATTCACCA	GCAAGAGGCC	GTCTTCCCCC	ACGGTGTCGT	GTGGTCACCG	GTTGGTGAGA
CTCTGGGTTC	CGAACGATCG	AGACCCCCTC	CAAGCGGTCT	GCTAAGTGGT	CGTTCTCCGG	CAGAAGGGGG	TGCCACAGCA	CACCAGTGGC	CAACCACTCT
980	1070	1150	1250	1340	1430	1520	1610	1700	1790
TCACTATAGG	TCTTGCGGCC	GTGAAGTGAA TCTGGTGGAG	CATGTATTGG	TGTAAAGGGT	GTATTACTGT	GGGCCCATCG	CGAACCGGTG	CCTCAGCAGC	GGACAAGAAA
AGTGATATCC	AGAACGCCGG	CACTTCACTT AGACCACCTC	GTACATAACC	ACATTTCCCA	CATAATGACA	CCCGGGTAGC	GCTTGGCCAC	GGAGTCGTCG	CCTGTTCTTT
970 TTAATACGAC	1060 CGATTGGAAT GCTAACCTTA		1240 GTGACTATTA CACTGATAAT	1330 ATCCAGACAC TAGGTCTGTG	1420 ACACAGCCAT TGTGTCGGTA	1510 CTAGCACCAA GATCGTGGTT	1600 ACTACTTCCC TGATGAAGGG	1690 GACTCTACTC CTGAGATGAG	1780 ACACCAAGGT TGTGGTTCCA
960	1050	1140	1230	1320	1410	1500	1590	1680	1770
CTTATCGAAA	ACCGGTCAAT	GGTGTCCAGT	TTCACTTTCA	ATAACCGACT	AAGTCTGAGG	GTCTCTGTAG	CTGGTCAAGG	CAGTCCTCAG	AAGCCCAGCA
GAATAGCTTT	TGGCCAGTTA	CCACAGGTCA	AAGTGAAAGT	TATTGGCTGA	TTCAGACTCC	CAGAGACATC	GACCAGTTCC	GTCAGGAGTC	TTCGGGTCGT
950	1040	1130	1220	1310	1400	1490	1580	1670	1760
TGCTTACTGG	TCTCTAGATA	TGTTTTAAAA	AACCTCTGGA	AGGTGGTGAT	GAGCCGTCTG	TCTGGTCACG	CCTGGGCTGC	GGCTGTCCTA	CGTGAATCAC
ACGAATGACC	AGAGATCTAT	ACAAAATTTT	TTGGAGACCT	TCCACCACTA	CTCGGCAGAC	AGACCAGTGC	GGACCCGACG	CCGACAGGAT	GCACTTAGTG
940	1030	1120	1210	1300	1390	1480	1570	1660	1750
GAGAACCCAC	AGGTCTCGAG	TCCTTGTCCT	TCTCCTGTGT	ACATTAGTCA	ACCTGCAAAT	GCCAAGGGAC	GCACAGCGGC	ACACCTTCCC	ACATCTGCAA
CTCTTGGGTG	TCCAGAGCTC	AGGAACAGGA	AGAGGACACA	TGTAATCAGT	TGGACGTTTA	CGGTTCCCTG	CGTGTCGCCG	TGTGGAAGGG	TGTAGACGTT
920	1020	1110	1200	1280 1290	1380	1470	1560	1650	
CAGAGCTCTC TGGCTAACTA	ATATCTCCTT	GCTTGGTCCT	TCCCTGAAAG	GAGGCTGGAG TGGGTCGCAT	AACACCCTGT	GCTTACTGGG	ACCTCTGGGG	AGCGGCGTGC	
GTCTCGAGAG ACCGATTGAT	TATAGAGGAA	CGAACCAGGA	AGGGACTTTC	CTCCGACCTC ACCCAGCGTA	TTGTGGGACA	CGAATGACCC	TGGAGACCCC	TCGCCGCACG	
	1010 1020	1000	1180 1190 1200	1280	1360 1370 1380	1460	1550 1560	1630 1640 1650	1730 1740
	CTTGGTACCA ATTTAAATTG ATATCTCCTT	CACCATGGAG TIGTGGTTAA	GCTTAGTGCA GCCTGGAGGG TCCCTGAAAG	GAGGCTGGAG	TCTCCAGAGA CAATGCCAAG AACACCCTGT	GGCCTGGTTT	CTCCAAGAGC ACCTCTGGGG	GGAACTCAGG CGCCCTGACC AGCGGCGTGC	CAGCTTGGGC ACCCAGACCT
	GAACCATGGT TAAATTTAAAC TATAGAGGAA	GTGGTACCTC AACACCAATT	CGAATCACGT CGGACTCTCC AGGGACTTTC	CTCCGACCTC	AGAGGTCTCT GTTACGGTTC TYGTGGGACA	CCGGACCAAA	GAGGTTCTCG TGGAGACCCC	CCTTGAGTCC GCGGGACTGG TCGCCGCACG	GTCGAACCCG TGGGTCTGGA
910	1000	1090	1180	1270	1360	1450	1540	1630	1720
TCTATATAAG	CTTGGTACCA	CACCATGGAG	GCTTAGTGCA	CTCCAGAGAA	TCTCCAGAGA	TGGACGACGG	TGGCACCCTC	GGAACTCAGG	TGCCCTCCAG
AGATATATTC	GAACCATGGT	GTGGTACCTC	CGAATCACGT	GAGGTCTCTT	AGAGGTCTCT	ACCTGCTGCC	ACCGTGGGAG	CCTTGAGTCC	ACGGGAGGTC
				<b>-</b> .					

1890	1980	2070	2160	2250	2340	2430	2520	2610	2700
AGTCCAGGGC	TTTTCCCCAG	GAGCCATATC	CCAGATTCCA	CCAGGCCTCG	GCCACATGGA	CACAGGTGTA	ACATCGCCGT	TCTACAGCAA	ACACGCAGAA
TCAGGTCCCG	AAAAGGGGTC	CTCGGTATAG	GGTCTAAGGT	GGTCCGGAGC	CGGTGTACCT	GTGTCCACAT	TGTAGCGGCA	AGATGTCGTT	TGTGCGTCTT
1880 ATGCAGCCCC AG' TACGTCGGGG TC	1970 TCTTCTGGCT TT	2060 GACCTGCCAA GAO CTGGACGGTT CT	2150 TTCTCTCCTC CCA AAGAGAAGGAG GGA	2240 GTAAGCCAGC CCI CATTCGGTCG GG	2330 CATGTCCGGA GC( GTACAGGCCT CG(	2420 CCCCGAGAAC CA( GGGCTCTTG GTC	2510 TATCCCAGCG ACA ATAGGGTCGC TG1	2600 TCCTTCTTCC TC1 AGGAAGAAGG AGA	2690 CACAACCACT ACA GTGTTGGTGA TGT
1870	1960	2050	2140	2230	2320	2410	2500	2590	2680
CATCCCGGCT A	AGGGAGAGGG T	GCTGGGCTCA G	CTCGGACACC T	CCGTGCCCAG G	TGGGTACCAA C	TACAGGGCAG CA	CAAAGGCTTC T.	CTCCGACGGC TV	TGAGGCTCTG CA
GTAGGGCCGA T	TCCCTCTCCC A	CGACCCGAGT C	GAGCCTGTGG A	GGCACGGGTC C	ACCCATGGTT G	ATGTCCCGTC G	GTTTCCGAAG A	GAGGCTGCCG AV	ACTCCGAGAC G
1860	1950	2040	2130	2220	2310	2400	2490	2580	2670
TGCCTGGACG	ACTCATGCTC	AGGGGCAGGT	ACTCCCTCAG	CACATGCCCA	ACACACCACG	CCTCTGTCCC	CCTGCCTGGT	CCGTGCTGGA	CCGTGATGCA
ACGGACCTGC	TGAGTACGAG	TCCCCGTCCA	TGAGGGAGTC	GTGTACGGGT	TGTGTGGTGC	GGAGACAGGG	GGACGGACCA	GGCACGACCT	GGCACTACGT
1850	1940	2030	2120	2210	2300	2390	2480	2570	2660
TCAGCGCTCC	TGCCCGCCCC	CTGCACACAA	CAAACTCTCC	ACAAAACTCA	GCATCCAGGG	GCTGTACCAA	GTCAGCCTGA	ACCACGCCTC	TTCTCATGCT
AGTCGCGAGG	ACGGCGGGG	GACGTGTGTT	GTTTGAGAGG	TGTTTTGAGT	CGTAGGTCCC	CGACATGGTT	CAGTCGGACT	TGGTGCGGAG	AAGAGTACGA
1840	1930	2020	2110	2200	2290	2380	2470	2560	2650
GAAGCCAGGC	CGGAGGCCTC	AACCCAGGCC	CCCCAAAGGC	AAATCTTGTG	AGAGTAGCCT	GAGAGTGACC	CAAGAACCAG	CAACTACAAG	GGGGAACGTC
CTTCGGTCCG	GCCTCCGGAG	TTGGGTCCGG	GGGGTTTCCG	TTTAGAACAC	TCTCATCGGA	CTCTCACTGG	GTTCTTGGTC	GTTGATGTTC	CCCCTTGCAG
1830 GTGTCTGCTG CACAGACGAC	1920 CCTCTTCACC GGAGAAGTGG	2010 AGGTGCCCCT TCCACGGGGA	2100 CCTAAGCCCA GGATTCGGGT	2190 TGCAGAGCCC ACGTCTCGGG		CTCGGCCCAC CCTCTGCCCT GAGCCGGGTG GGAGACGGGA	2460 ATGAGCTGAC TACTCGACTG	2550 AGCCGGAGAA TCGGCCTCTT	
1810 1820 GGCCAGCACA GGGAGGGGG CCGGTCGTGT CCCTCCCTCC	1910 1920 AGCAAGGCAG GCCCCGTCTG CCTCTTCACC TCGTTCCGTC CGGGCAGAC GGAGAAGTGG	2000 2010 GCTCTGGGCA GGCACAGGCT AGGTGCCCCT CGAGACCCGT CCGTGTCCGA TCCACGGGGA	2090 CTGCCCCTGA CCT GACGGGGACT GGA	2170 2180 GTAACTCCCA ATCTTCTCTC TGC CATTGAGGGT TAGAAGAGAG ACG	2270 2280 CAAGGCGGGA CAGGTGCCCT GTTCCGCCCT GTCCACGGGA		2450 2450 CCATCCCGGG ATGAGCTGAC GGTAGGGCCC TACTCGACTG	2530 2540 2550 GGAGTGGGAG AGCAATGGGC AGCCGGAGAA CCTCACCCTC TCGTTACCCG TCGGCCTCTT	2630 GACAAGAGCA CTGTTCTCGT
1810	1900	1990	2080	2170	2260	2350	2440	2530	2620
GGCCAGCACA	AGCAAGGCAG	GCTCTGGGCA	CGGGAGGACC	GTAACTCCCA	CCCTCCAGCT	CAGAGGCCGG	CACCCTGCCC	GGAGTGGGAG	GCTCACCGTG
CCGGTCGTGT	TCGTTCCGTC	CGAGACCCGT	GCCCTCCTGG	CATTGAGGGT	GGGAGGTCGA	GTCTCCGGCC	GTGGGACGGG	CCTCACCCTC	CGAGTGGCAC

Figure 14 (continued)

2880 CTTT 3AAA	2970 3676 3CAC	3060 VCCT YGGA	3150 1AGC 1TCG	3240 ICAC GTG	3330 AGG	3420 CAC GTG	3510 CCT GGA	3600 VAAC PTTG
	TGTGCAC	AGCAGC! TCGTCG!	TTCTGTG	CTACCCC	CCTGTGG GGACACC	CACCACA GTGGTGT	SAACACT CTTGTGA	3600 TCAGACAAAC AGTCTGTTTG
2870 GAGACTGTG CTCTGACAC	2960 GGCCCAGGC CCGGGTCCG	3050 CCTCCCTCC GGAGGGAGG	3140 ACTGTCCTG TGACAGGAC	3230 CTCACCCAT SAGTGGGTA	3320 CTCTCGGGC SAGAGCCCG	3410 CCACACGCC SGTGTGCCG	3500 GCACACGT SCGTGTGCA	3590 GCTGACCTGC CGACTGGACG
				_				
- •					GGGGACA	AGGTTGG TCCAACC	AGCAAGG TCGTTCC	3580 TTCTCCACAT AAGAGGTGTA
2850 3CTGCCC 3GACGGG	2940 PCCCACT NGGGTGA	3030 SGGATTT	3120 CCCTGC GGGACG	3210 GTAGGG CATCCC	3300 GACTCC CTGAGG	3390 GCACTG CGTGAC	3480 GACCAG CTGGTC	3570 TCTCGGCAGC AGAGCCGTCG
							-	TCTCC
2840 TAAAGCACCC ATTTCGTGGC	2931 GAGGCAGAGG CTCCGTCTCC	3020 CTCGGCAGGG GAGCCGTCCC	3110 GACAGACACA CTGTCTGTGT	3200 CCTAGTCCAT GGATCAGGTA	3290 ATGGGGACAC TACCCCTGTG	3380 GTTCAACAAA CAAGTTGTTT	3470 CTGCACAGCA GACGTGTCGT	3560 CCCACGAGCC GGGTGCTCGG
2830 AGCATGGAAA TCGTACCTTT	2920 TGGCATGAGG ACCGTACTCC	3010 AGGGGCTGCC TCCCCGACGG	3100 AGCCCCTGGG TCGGGGACCC	3190 CGGGGGCATG GCCCCCGTAC	3280 TCGCACCCGC AGCGTGGGCG			3550 CACCTCAAGG GTGGAGTTCC
2820 CCGGGCGCCC GGCCCGCGGG	2910 GAGGCCTGAG CTCCGGACTC	3000 GGGCTCAGCC CCCGAGTCGG	3090 AAGCCCTAGG TTCGGGATCC		3270 CTGCCCAGCC GACGGGTCGG			3540 CCCCACGCGG GGGGTGCGCC
	2900 GGCCGAGTCT CCGGCTCAGA		3080 GGGCCACGGG CCCGGTGCCC	3170 TCCCGACCTC AGGGCTGGAG	3260 CCTGGCTGCC GGACCGACGG		3440 GCCTCACACA CGGAGTGTGT	3530 CCCCCACGAG GGGGGTGCTC
2800 GTACCCCCTG CATGGGGGAC	2890 CCACGGGTCA GGTGCCCAGT	2980 TGCCTGGGCC ACGGACCCGG	3070 GCCCTGGGCT CGGGACCCGA	3160 GCCCCTGTCC CGGGGACAGG	3250 GGCACTAACC CCGTGATTGG	3340 GACTGGTGCA CTGACCACGT	3430 ACACGTGCAC TGTGCACGTG	3520 CGGACACAGG GCCTGTGTCC
	2810 2820 2830 2840 2850 2850 2860 TACATACTTC CCGGGCGCCC AGCATGCACC AGCGCTGCCC TGGGCCCCTG CGAGACTGTG ATGGTTK ATGTATGAAG GGCCCGCGGG TCGTACCTTT ATTTCGTGGG TCGCGACGGG ACCCGGGGAC GCTCTGACAC TACCAAK	TACATACTIC CCGGGCGCCC AGCATGGAAA TAAAGCACCC AGCGCTGCCC TGGGCCCCTG CGAGACTGTG ATGGTTK ATGTATGAAG GGCCGGGGG TCGTACCTTT ATTTCGTGGG TCGCGGGG ACCCGGGGAC GCTCTGACAC TACCAAA  2900 2910 2920 2930 2940 2950 2960 GGCCGAGTCT GAGGCCTGAG GAGGCAGAGC GGGTCCCACT GTCCCCACAC TGCCCAGGC TGTGCAG CCGGCTCAGA CTCCGGACTCC CTCCGTCTCC CCCAGGGTGA CAGGGTTGT ACCGGTCCG ACACGTC	2830 2840 2850 AGCATGGAAA TAAAGCACCC AGCGCTGCCC TGGCCCCTG CGAGACTGTG ATGGTTG TCGTACCTTT ATTTCGTGGG TCGCGACGGG ACCCGGGGAC GCTCTGACCT TACCAAG TGGCATGAGG GAGGCAGAG GGGTCCCACT GTCCCCACAC TGCCCAGG TGTCCACACTCC CTCCGTCTCG CGGTCCCAGG TGTCCACTCACTC TCGCCCAGG TGTCACTC TCGCCCAGG TGTCACTC TCGCCCAGG TGGGGATTT GCCAGGGTGG CCCTCCCTCC AGCAGCATTT GCCAGGGTGG CCCTCCCTCC AGCAGCATTT GCCAGCGTGG CCCTCCTCC AGCAGCATTT GCCAGCGTGG CCCTCCTCC AGCAGCATTT GCCAGCACCTC GGGAGGGAGG TCGTCGTTCGTTCGTCGTTCGTCGTTCGTCGTCGTCGTCG	2810         2820         2830         2840         2850         2850         2860         2870           ATGTATACTTC         CCGGGCGCCC         AGCATGGAAA         TAAAGCACCC         AGCGCTGCCC         CGAGACTGTG         TACGACTGCC         TACGACTCCC         TACGACTGCC         TACGACTGCC         TACGACTGCC         TACGACTCCCC         TACGACTCCCC         TACGACTCCCC         TACGACTCCCC         TACGACTCCCCC         TACGACTCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	2830   2840   2850   2860   2870	2810         2820         2830         2840         2850         2860         2870           ATGTATCTC         CGGGGGGCCC         AGCATGGAAA         TAAAGCACCC         AGCGCTGCCC         TGGGCCCCTG         CGAGCTGTG         CGAGCTGTG         CAGGCTGTG         CAGGGTGTG         CAGGGTGTG         CAGGGTGG         CAGGGTGGG         CAGGGTGGG         CAGGGTGGG         CAGGGTGGG         CAGGGTGGG         CAGGGTGGG         CAGGGTGGG         CAGGGTGGG         CAGGGTGGG         CAGGGTGGGG         CAGGGTGGGG         CAGGGTGGGG         CAGGGTGGG         CAGGGTGGG         CAGGGTGGGG         CAGGGTGGGG         CAGGGTGGGG         CAGGGTGGGG         CAGGGTGGGG         CAGGGTGGGG         CAGGGTGGGGG	2810         2820         2830         2840         2840         2850         2860         2860         2870 <th< td=""><td>  2810  </td></th<>	2810   2810

3690	3780	3870	3960	4050	4140	4230	4320	4410	4500	
TGGCCCACTT	CCCGTGCCTT	CATTCTATTC	ATGGCTTCTG	GTTACGCGCA	CCTCTCAAAA	CCCAGTTCCG	AAGTAGTGAG	TCCTAGCGTG	ATTGGCAAGA	
ACCGGGTGAA	GGGCACGGAA	GTAAGATAAG	TACCGAAGAC	CAATGCGCGT	GGAGAGTTTT	GGGTCAAGGC	TTCATCACTC	AGGATCGCAC	TAACCGTTCT	
3680	3760	3860	3950	4040	4130	4220	4310	4400	4490	
TCCCTGGCCC	CATCIGITGT TIGCCCCTCC	GAGTAGGTGT	GGTGGGCTCT	GGGTGTGGTG	GTTCGCCGGG	CCTAACTCCG	GCTATTCCAG	TTGACGGCAA	AAATATGGGG	
AGGGACCGGG	GTAGACAACA AACGGGGAGG	CTCATCCACA	CCACCCGAGA	CCCACACCAC	CAAGCGGCCC	GGATTGAGGC	CGATAAGGTC	AACTGCCGTT	TTTATATACCCC	
3670	3760	3850	3940	4030	4120	4210	4300	4390	4480	
CCACGTCACG	CATCTGTTGT	CGCATTGTCT	CTGGGGATGC	TAAGCGCGGC	TTCTCGCCAC	CCATCCCGCC	CGGCCTCTGA	CGCGCCAAAC	CCGTGTCCCA	
GGTGCAGTGC	GTAGACAACA	GCGTAACAGA	GACCCCTACG	ATTCGCGCCG	AAGAGCGGTG	GGTAGGGCGG	GCCGGAGACT	GCGCGGTTTG	GGCACAGGGT	
3660	3750	3840	3930	4020	4110	4200	4290	4380	4470	
GGATCACACA	AGTTGCCAGC	GAAATTGCAT	AGCAGGCATG	AGCGGCGCAT	TTCCCTTCCT	CTAACTCCGC	GAGGCCGCCT	GCTGCGATTT	TGCATCGTCG	
CCTAGTGTGT	TCAACGGTCG	CTTTAACGTA	TCGTCCGTAC	TCGCCGCGTA	AAGGGAAGGA	GATTGAGGCG	CTCCGGCGGA	CGACGCTAAA	ACGTAGCAGC	
3650	3740	3830	3920	4010	4100	4190	4280	4370	4460	
CACACACAGG	TGTGCCTTCT	ATAAAATGAG	GGAAGACAAT	CGCGCCCTGT	TTTCGCTTTC	AGTCCCGCCC	TGCAGAGGCC	ACAGCTCAGG	ACCATTGAAC	
GTGTGTGTCC	ACACGGAAGA	TATTTTACTC	CCTTCTGTTA	GCGCGGACA	AAAGCGAAAG	TCAGGGCGGG	ACGTCTCCGG	TGTCGAGTCC	TGGTAACTTG	
3640 AGCCGCCACA TCGGCGGTGT	3730 CAGCCTCGAC GTCGGAGCTG	3820 TCCTTTCCTA AGGAAAGGAT	3910 GGGAGGATTG CCCTCCTAAC	4000 GGTATCCCCA CCATAGGGGT	4090 CGCCCGCTCC GCGGCGAGG	4180 CAGCAACCAT GTCGTTGGTA	4270 TTTTTATTTA AAAAATAAAT	4360 AAAAGCTTGG TTTTCGAACC	4450 TCATGGTTCG	
3630 GTGCCCCTGC CACGGGGACG	3720 CAGGACGGAT GTCCTGCCTA	3800 3810 GGAAGGTGCC ACTCCCACTG CCTTCCACGG TGAGGGTGAC	3900 GACAGCAAGG CTGTCGTTCC	3990 GGCTCTAGGG CCGAGATCCC	4080 AGCGCCCTAG TCGCGGGATC	4170 CTCAATTAGT GAGTTAATCA	4260 TGACTAATTT ACTGATTAAA	4350 GGCTTTTGCA CCGAAAACGT		
3610 CCAGCCCTCC TCTCACAAGG GGTCGGGAGG AGAGTGTTCC	3710 CCCTTCCCTG GGGAAGGGAC		3890 GGTGGGGCAG GAC CCACCCGTC CTG	3980 AACCAGCTGG TTGGTCGACC	4060 4070 4080 GCGTGACCGC TACACTTGCC AGCGCCCTAG CGCACTGGCG ATGTGAACGG TCGCGGGATC	4150 4160 4170 AAGGGAAAA AAGCATGCAT CTCAATTAGT TTCCCTTTTT TTCGTACGTA GAGTTAATCA	4240 4250 4250 CCCATTCTCC GCCCCATGGC TGACTAATTT GGGTAAGAG CGGGGTACCG ACTGATTAAA	4330 4340 4350 GAGGCTTTTT TGGAGGCCTA GGCTTTTGCA CTCCGAAAAA ACCTCCGGAT CCGAAAACGT	4420 4430 4440 AAGGCTGGTA GGATTTTATC CCCGCTGCCA TTCCGACCAT CCTAAAATAG GGGCGACGGT	
3610	3700	3790	3880	3970	4060	4150	4240	4330	4420	
CCAGCCCTCC	CCCAGTGCCG	CCTTGACCCT	TGGGGGGTGG	AGGCGGAAAG	GCGTGACCGC	AAGGGAAAAA	CCCATTCTCC	GAGGCTYTYT	AAGGCTGGTA	
GGTCGGGAGG	GGGTCACGGC	GGAACTGGGA	ACCCCCCACC	TCCGCCTTTC	CGCACTGGCG	TTCCCTTYYT	GGGTAAGAGG	CTCCGAAAAA	TTCCGACCAT	

Figure 14 (continued)

4520	4590 AAACAGAATC TTTGTCTTAG	4680 AGTAGAGAAC TCATCTCTTG	4770 GCAAGTAAAG CGTTCATTTC	4860 ACAAGGATCA TGTTCCTAGT	4950 CTCTCTGAGG GAGAGACTCC	5040 GCTCCCCTCC CGAGGGGAGG	5130 TGACATAATT ACTGTATTAA	5220 TAAITGITTG ATTAACAAAC	5310 CAGAAGAAAT GTCTTCTTTA	5400 AGGACTTTCC TCCTGAAAGG
4520   4530   4540   4550   4560   4560   4560   4560   4560   4560   4560   4560   4560   4660	4580 AGTGGAAGGT TCACCTTCCA	4670 TATAGTTCTC ATATCAAGAG	4760 ACCGGAATTG TGGCCTTAAC	4850 ACTCTTYGTG TGAGAAACAC	4940 CCCAGGCGTC GGGTCCGCAG	5030 CAAGTTCTCT GTTCAAGAGA	5120 TTCTGTGGTG AAGACACCAC	5210 CTACTGATTC GATGACTAAG		
4520		4660 ACAGAATTAA TGTCTTAATT	•	4840 GCCACCTTAG CGGTGGAATC	4930 TCCCAGAATA AGGGTCTTAT	5020 AAGATGCTTT TTCTACGAAA	5110 GGAACCTTAC CCTTGGAATG	5200 ATGTGTTAAA TACACAATTT	5290 TGAGGAAAAC ACTCCTTTTG	5380 GAGAAAGGTA CTCTTTCCAT
ACCCTGGCCT CCGCTCAGGA ACGAGTTCAA TGGGACCGGA GGCGAGTCCT TGCTCAAGTT  4610 GGGTAGGAAA ACCTGGTTCT CCATTCCTGA CCCATCCTTT TGGACCAAGGT TGGATAGGAC TGGATAAAGG TGGATAAAAG TGGATAAAAG TGGATAAAAG TTTTCGTA TTTTCGTA TTTTTTTTTT		, – –		4830 AATCAACCAG TTAGTTGGTC	4920 TATAAACTTC ATATTTGAAG	5010 GACTAACAGG CTGATTGTCC	5100 TCTTTGTGAA AGAAACACTT	5190 TAAGTGTATA ATTCACATAT	5280 ATGCCTTTAA TACGGAAATT	5370 CAAAAAAGAA GTTTTTTCTT
ACCCTGGCCT GGGAGTCCT GGGAGTCCT GGGTAGGAAA ACCTGGTTTTC TGGACCAGGA ACCACCGAGGA ACCACCTTTC TGGACATTTTC TGGATAGTC TGGATAGTC TGGATAGTC TGGATAGTC TGGATAGTC TGGATAGTC TGGATAGTC TTTTCCGTC TTTTTCCGTTG TTTTCCGTTG TTTTTCCGTTG TTTTTCCGTTG TTTTTCCGTTG TTTTAGATAGC TTTTAGATAGT TTTTCCGTAG TTTTAGATAGC TTTTTCGGT TTTTCCGTAG TTTTAGATAGC TTTTTCGGT TTTTCCGTAG TTTTAGATAGC TTTTTCGGT TTTTCGGT TTTTTCGGT TTTTCGGT TTTTTCGGT TTTTCGGT TTTTCGGT TTTTCGGT TTTTTCGGT TTTTTCGGT TTTTCGGT TTTTTCGGT TTTTTTCGGT TTTTTCGGT TTTTTCGGT TTTTTCGGT TTTTTTCGGT TTTTTTCGGT TTTTTTCGGT TTTTTTCGGT TTTTTTCGGT TTTTTCGGT TTTTTTCGGT TTTTTTCGGT TTTTTTCGGT TTTTTTCGGT TTTTTTCGGT TTTTTTCGGT TTTTTTCGGT TTTTTTCGGT TTTTTTCGGT TTTTTCGGT TTTTTTCGGT TTTTTTCGGT TTTTTCGGT TTTTTTCGGT TTTTTTCGGT TTTTTCGGT TTTTTTCGGT TTTTTTCGGT TTTTTTTCGGT TTTTTTTT			• •		- •	5000 CGAGAAGAAA GCTCTTCTTT	5090 GCTTTAGATC CGAAATCTAG	5180 ATAAAATTTT TATTTTAAAA	5270 CAGTGGTGGA GTCACCACCT	5360 TCTACTCCTC AGATGAGGAG
4520 ACCCTGGCCT TGGGACCGGAA GGGTAGGAAA CCCATCCTTT TGGATAGTC AT00 ACCACGAGGA TGGATAGTC ACTTTCACTT ASCTTTCACT TTTTCCGTAG TTTTCCAACCT TTTTCCAACCT TTTTCCAACCT TAAGGTTGGA S330 GATGATGAGG CTACTACTCC TAAGGTTGGA		4630 CCATTCCTGA GGTAAGGACT	4720 TTGCCAAAAG AACGGTTTTC	4810 CTGTTTACCA GACAAATGGT	4900 CAGAAATIGA GTCTTTAACT	4990 TTGAAGTCTA AACTTCAGAT	5080 ACTTTTGCTG TGAAAACGAC	5170 TAAGGTAAAT ATTCCATTTA	5260 TGAATGGGAG ACTTACCCTC	5350 CTCTCAACAT GAGAGTTGTA
4520 ACCCTGGCCT TGGGACGGAA CCCATCCTTT 4700 ACCACGAGGA TGGTGCTCT A480 TTGGATAGTC A480 TTGGATAGTC A480 TTGGATAGTC A790 TTGGATAGTC ACTTTCACT 5060 CATTTTCCGTAG 5150 CCTACAGAGA GGATGTCT TAAGGTTGGA		4620 ACCTGGTTCT TGGACCAAGA	4710 GCTCATTTTC CGAGTAAAAG	4800 GGAGGCAGTT CCTCCGTCAA	4890 ACGTTTTTCC TGCAAAAGG	4980 AAGTATAAGT TTCATATTCA	5070 AGACCATGGG TCTGGTACCC	5160 TTTAAAGCTC AAATTTCGAG	5250. ATGGAACTGA TACCTTGACT	5340 CTACTGCTGA GATGACGACT
4510 ACGGAGACCT TGCTGATTAT ACACATAATA ACACAGAATT ACACAGAATT ATGACATGGT ATCTGTACCA A870 TGCAGGAATT ACGTCCTTAGG A180 TGCAGGAATT ACGTCCTTAGG ATTTCGATA 5050 TAAAGCTATG 5050 TAAAAGCTATG TAAAACTA 5230 TGTATTTTAG 5230 TGTATTTTAG 5230 TGTATTTTAG GGCCATCAGG ACGTAGATA	4520 ACCCTGGCCT TGGGACCGGA	4610 GGGTAGGAAA CCCATCCTTT	4700 ACCACGAGGA TGGTGCTCCT	4790 TTGGATAGTC AACCTATCAG	4880 TGAAAGTGAC ACTTTCACTG	4970 AAAAGGCATC TTTTCCGTAG		5150 CCTACAGAGA GGATGTCTCT	5240 ATTCCAACCT TAAGGTTGGA	
	4510 ACGGAGACCT TGCCTCTGGA	4600 TGGTGATTAT ACCACTAATA	4690 TCAAAGAACC AGTTTCTTGG	4780 TAGACATGGT ATCTGTACCA	4870 TGCAGGAATT ACGTCCTTAA	4960 TCCAGGAGGA AGGTCCTCCT	5050 TAAAGCTATG ATTTCGATAC	5140 GGACAAACTA CCTGTTTGAT	5230 TGTATTTTAG ACATAAAATC	5320 GCCATCTAGT CGGTAGATCA



5490	5580	5670	5760	5850	5940	6030	6120	6210	6300
AAAAAGCTGC	TTTTTCTTAC	TTAATAAGGA	CTCCCACACC	AGCAATAGCA	GTCTGGATCG	TACAAATAAA	TCTTATCATG	ACAATTCCAC	TCACTGCCCG
TTTTTCGACG	AAAAAGAATG	AATTATTCCT	GAGGGTGTGG	TCGTTATCGT	CAGACCTAGC	ATGTTTATTT	AGAATAGTAC	TGTTAAGGTG	AGTGACGGGC
5480	5570	5660	5750	5840	5930	6020	6110	6200	6290
ACCACAAAGG	AACATACTGT	TGTAAAGGGG	TYTAAAAAAC	TTACAAATAA	ATCTTATCAT	TTATAATGGT	CATCAATGTA	TTATCCGCTC	TGCGTTGCGC
TGGTGTTTCC	TTGTATGACA	ACATTTCCCC	AAATYTYTYG	AATGTTTATT	TAGAATAGTA	AATATTACCA	GTAGTTACAT	AATAGGCGAG	ACGCAACGCG
5470	5560	5650	5740	5830	5920	6010	6100	6190	6280
TGCTATTTAC	TTATAATCAT	CTTTTTAATT	TTTTACTTGC	CTTATAATGG	TCATCAATGT	TTATTGCAGC	TGTCCAAACT	TGTGAAATTG	TCACATTAAT
ACGATAAATG	AATATTAGTA	GAAAAATTAA	AAAATGAACG	GAATATTACC	AGTAGTTACA	AATAACGTCG	ACAGGTTTGA	ACACTTTAAC	AGTGTAATTA
5460 TTGCTTGCTT AACGAACGAA	5550 GGCATAACAG CCGTATTGTC	5640 GTACCTTTAG CATGGAAATC	5730 TTTGTAGAGG AAACATCTCC	5820 TTTATTGCAG AAATAACGTC	TYGTCCAAAC AACAGGTTYG	6000 CCCAACTTGT GGGTTGAACA	6090 AGTTGTGGTT TCAACACCAA	6180 CTGTTTCCTG GACAAAGGAC	6270 GTGAGCTAAC CACTCGATTG
5450	5540	5630	5720	5810	5900	5990	6080	6170	6260
AATAGAACTC	TYTATAAGTA	CAAAAATTGT	CCATACCACA	TGTTAACTTG	TAGTTGTGGT	CTTCGCCCAC	ACTGCATTCT	ATGGTCATAG	TGCCTAATGA
TTATCTTGAG	AAATATYCAT	GTTTTTAACA	GGTATGGTGT	ACAATTGAAC	ATCAACACCA	GAAGCGGGTG	TGACGTAAGA	TACCAGTATC	ACGGATTACT
5440	5530	5620	5710	5800	5890	5980	6070	6160	6250
TGTGTTTAGT	TTCTGTAACC	TAACTATGCT	TCATAATCAG	CAATTGTTGT	CACTGCATTC	TGCTGGAGTT	CATTTTTTC	TGGCGTAATC	AAGCCTGGGG
ACACAAATCA	AAGACATTGG	ATTGATACGA	AGTATTAGTC	GTTAACAACA	GTGACGTAAG	ACGACCTCAA	GTAAAAAAG	ACCGCATTAG	TTCGGACCCC
5430	5520	5600 5610	5690 5700	5790	5880	5970	6060	6150	6240
TGAGTCATGC	TGGAAAAATA	CATAGAGTGT CTGCTATTAA	TATAGTGCCT TGACTAGAGA	AAAATGAATG	GCATTTTTTT	GGGGATCTCA	ACAAATAAAG	AGCTAGAGCT	ATAAAGTGTA
ACTCAGTACG	ACCTTTTTAT	GTATCTCACA GACGATAATT	ATATCACGGA ACTGATCTCT	TTTTACTTAC	CGTAAAAAA	CCCCTAGAGT	TGTTTATTTC	TCGATCTCGA	TATTTCACAT
5430	5520 5510 5520	5600	5690	5770 5780	5870	5950 5960	6040 6050 605A	6140	6220 6230 6240
TTCAGAATTG CTAAGTTTTT TGAGTCATGC	ACTGCTATAC AAGAAAATTA TGGAAAAATA	CATAGAGTGT	TATAGTGCCT	TCCCCCTGAA CCTGAAACAT	CACAAATAAA	GCTGGATGAT CCTCCAGCGC	GCAATAGCAT CACAAATTTC ACAAATAAAG	GTCGACCTCT	ACAACATACG AGCCGGAAGC ATAAAGTGTA
AAGTCTTAAC GATTCAAAAA ACTCAGTACG	TGACGATATG TTCTTTTAAT ACCTTTTTAAT	GTATCTCACA	ATATCACGGA	AGGGGGACTT GGACTTTGTA	GTGTTTATTT	CGACCTACTA GGAGGTCGCG	CGTTATCGTA GTGTTTAAAG TGTTTATTTC	CAGCTGGAGA	TGTTGTATGC TCGGCCTTCG TATTTCACAT
5410	5500	5590	5680	5770	5860	5950	6040	6130	6220
TYCAGAATYG	ACTGCTATAC	TCCACACAGG	ATATTTGATG	TCCCCCTGAA	TCACAAATTT	GCTGGATGAT	GCAATAGCAT	TCTGTATACC	ACAACATACG
AAGYCTYAAC	TGACGATATG	AGGTGTGTCC	TATAAACTAC	AGGGGGACTT	AGTGTTTAAA	CGACCTACTA	CGȚTATCGTA	AGACATATGG	TGTTGTATGC

### CGCTCTTCCG GCGAGAAGGC TTATCCACAG GCGTTTTTCC TACCAGGCGT GGAAGCGTGG CCTTCGCACC CCCGTTCAGC AATAGGTGTC CGCAAAAAGG GGGCAAGTCG ATGGTCCGCA AGGTGGCGAA ACCCGACAGG ACTATAAAGA TCCACCGCTT TGGGCTGTCC TGATATTTCT CCATTATGCC CGCGTTGCTG CGGTCCTTGG CATTTTTCCG GCGCAACGAC CCTGCCGCTT ACCGGATACC TGTCCGCCTT TCTCCCTTTCG GGACGCCGAA TGGCCTATGG ACAGGCGGAA AGAGGGAAGC CTCCGCCAAA CGCATAACCC GGTAATACGG GCACGAACCC GCGAGGTTCG ACCCGACACA CGTGCTTGGG GCGTATTGGG 6470 6650 6740 6920 GAGGCGGTTT GTATCAGCTC ACTCAAAGGC TGAGTTTCCG GTAAAAAGGC CGCTCCAAGC TGGGCTGTGT 6550 6640 6730 6820 6910 6460 TTAGCCGGTT GCGCCCCCT CGCGCGGGA CATAGTCGAG GCCAGGAACC 6720 6450 6540 6630 6810 0069 6360 6780 6790 6800 TGTAGGTATC TCAGTTCGGT GTAGGTCGTT ACATCCATAG AGTCAAGCCA CATCCAGCAA CTCAAGTCAG GAGTTCAGTC TGCATTAATG AATCGGCCAA GCGCCGAGCG 6710 CCAGCAAAAG GGTCGTTTTC 6440 CGCCGCTCGC 6530 6620 6890 TCGTTCGGCT CCCTTTGGAC AGCACGGTCG ACGTAATTAC 6430 AGCAAGCCGA 6520 GAGCAAAAGG AAAATCGACG 6700 CTGTTCCGAC CICGITITICC 6610 6880 6780 TGTAGGTATC CTGCGCTCGG GACGCGAGCC AAGAACATGT TTCTTGTACA GAGCATCACA CTCGTAGTGT TCGTGCCAGC GTGCGCTCTC 6420 6510 9 0699 CACGCGAGAG 6760 6770 CGCTTTCTCA ATGCTCACGC GCGAAAGAGT TACGAGTGCG 6320 GGGAAACCTG CACTGACTCG TAACGCAGGA CCCCCTGAC AAGCTCCCTC 6410 GTGACTGAGC 6500 TTAGICCCCT ATTGCGICCT 6590 6680 TTCGAGGGAG 6860 CTTTCCAGTC GAAAGGTCAG CTTCCTCGCT GAAGGAGCGA AATCAGGGGA ATAGGCTCCG TATCCGAGGC TTCCCCCTGG AAGGGGGACC 6850 6490 6310 6400

Figure 14 (continued)

ACTGGTAACA

TGACCATTGT

AGACACGACT TATCGCCACT GGCAGCAGCC TCTGTGCTGA ATAGCGGTGA CCGTCGTCGG

CAACCCGGTA AGACACGACT TATCGCCACT

GTTGGGCCAT

GTCTTGAGTC CAGAACTCAG

GGTAACTATC CCATTGATAG

CGCCTTATCC GCGGAATAGG

CCGACCGCTG

GGCTGGCGAC

GTATTTGGTA

CATAAACCAT

GAACTICACC ACCGGATTGA TGCCGATGTG ATCTTCCTGT

TGGCCTAACT ACGGCTACAC TAGAAGGACA

CTTGAAGTGG

CTACAGAGTT GATGTCTCAA

GTAGGCGGTG CATCCGCCAC

TCGCTCCATA

CCTAATCGTC

GGATTAGCAG AGCGAGGTAT

6940

.6970

969

6950

7000

0669

6980

CCACCAAAAA

GGTGGTTTTT

CGCTGGTAGC

7100

7090

7080

7070

7060

7050

7040

7030

GCGACCATCG

AACAAACCAC

TGATCCGGCA

TGGTAGCTCT

GAAAAAGAGT CTTTTTCTCA

GTTACCTTCG

GCTGAAGCCA

TCTGCGCTCT AGACGCGAGA

CGACTTCGGT

CAATGGAAGC

ACCATCGAGA

ACTAGGCCGT

CAGTGGAACG GTCACCTTGC

GTCTGACGCT

7180

7170

7160

7150

7140

7130

TITITICCIAG AGTICITCIA GGAAACTAGA AAAGATGCCC CAGACTGCGA

CCTTTGATCT TTTCTACGGG

TCAAGAAGAT

AAAAAGGATC

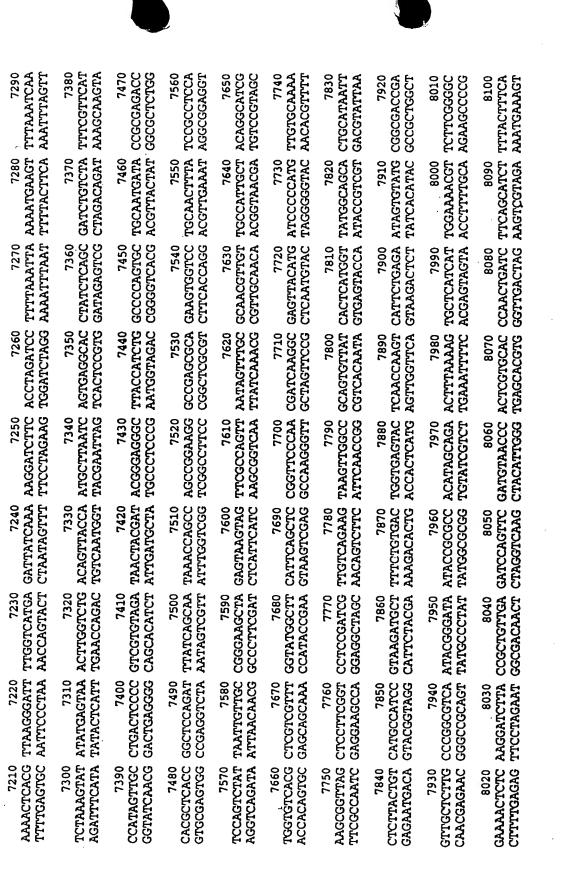
GCAGCAGATT ACGCGCAGAA

TTGTTTGCAA

AACAAACGIT CGTCGTCTAA IGCGCGTCTT

Ū

pD17-cJ-dCH2.H1



8190 CTCATACTCT GAGTATGAGA	8280 AAACAAATAG TTTGTTTATC	
8180 ATGTTGAATA TACAACTTAT	8270 TTAGAAAAAT AATCTYTTTA	
8170 CGACACGGAA GCTGTGCCTT	8260 TTGAATGTAT AACTTACATA	
8160 GGAATAAGGG CCTTATTCCC	8250 GGATACATAT CCTATGTATA	
8150 CGCAAAAAG GCGTTTTTTC	8240 TCTCATGAGC AGAGTACTCG	8330 C G
8110 8120 8130 8130 8140 8150 8150 8140 8150 8160 8170 8180 8190 CCAGCGTTTC TGGGTGAGCA AAAACAGGAA GGCAAAATGC CGCAAAAAG GGAATAAGGG CGACACGGAA ATGTTGAATA CTCATACTCT GGTCGCAAAG ACCCACTCGT TTTTGTCCTT CGTTTTTACG GCGTTTTTTC CCTTATTCCC GCTGTGCCTT TACAACTTAT GAGTATGAGA	8280 8270 8270 8280 8280 TCCTTTTTCA ATAITATTCA AGGATTATTG TCTCATGAGC GGATACATAT TTGAATGTAT TTAGAAAAAT AAACAAATAG AGGAAAAAGT TATAATAACT TCGTAAATAG TCCCAATAAC AGAGTACTTCG CCTATGTATA AACTTACATA AATCTTTTA TTTGTTTATC	8290 8320 8320 8320 8320 GGGTTCCGCG CACATTCCC CGAAAAGTGC CACCTGACGT CCCAAGGGG GCTTTTCACG GTGGACTGCA G
8130 AAAACAGGAA TTTTGTCCTT	8220 AGCATTTATC TCGTAAATAG	8310 CGAAAAGTGC GCTTTTCACG
8120 TGGGTGAGCA ACCCACTCGT	8210 ATATTATTGA TATAATAACT	8300 CACATTTCCC GTGTAAAGGG
8110 CCAGCGTTTC 1 GGTCGCAAAG A	8200 TCCTTTTTCA AGGAAAAGT	8290 GGGTTCCGCG CCCAAGGCGC

### Comparison of whole chiBR96 and deleted CH2 chiBR96 on Ley/K ELISA

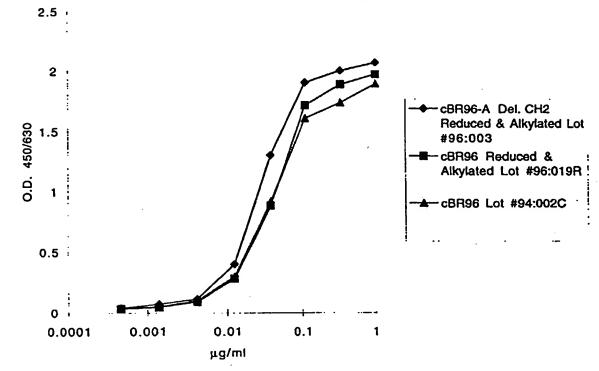


Figure 15

hBR96-2B: L235 to A235 and G237 to A237

hBR96-2C: E318 to S318, K320 to S320, and K322 to S322

hBR96-2D: P331 to A331

hBR96-2E: L235 to A235, G237 to A237, E318 to S318, K320 to S320, and

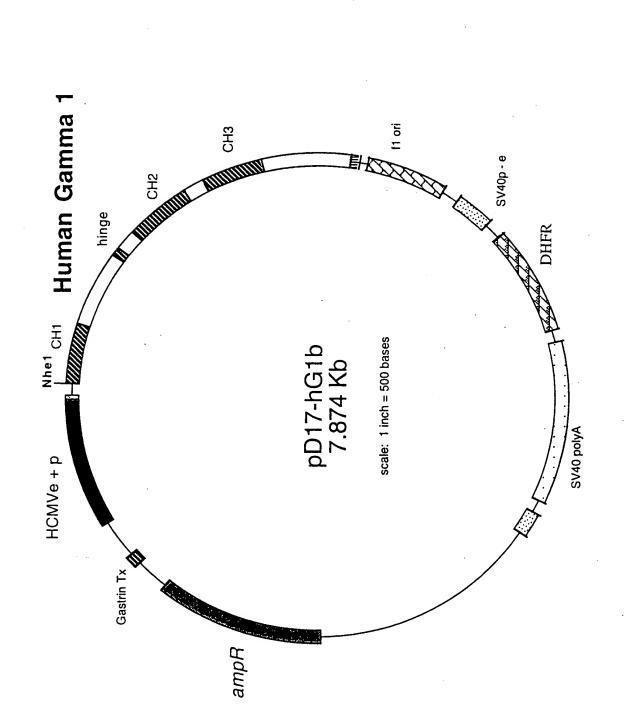
K322 to S322

hBR96-2F: L235 to A235, G237 to A237, and P331 to A331

hBR96-2G: E318 to S318, K320 to S320, K322 to S322, and P331 to A331

hBR96-2H: L235 to A235, G237 to A237, E318 to S318, K320 to S320, K322 to

S322, and P331 to A331





### FIGURE 18A

	1	GGTACCAATT	TAAATTGATA	TCTCCTTAGG	TCTCGAGTCT	CTAGATAACC
	51	GGTCAATCGA	TTGGAATTCT	TGCGGCCGCT	TGCTAGCCAC	CATGGAGTTG
	101	TGGTTAAGCT	TGGTCTTCCT	TGTCCTTGTT	TTAAAAGGTG	TCCAGTGTGA
	151	AGTGCAACTG	GTGGAGTCTG	GGGGAGGCTT	AGTGCAGCCT	GGAGGGTCCC
	201	TGCGACTTTC	CTGTGCTGCA	TCTGGATTCC	CGTTCAGTGA	CTATTACATG
	251	TATTGGGTTC	GCCAGGCTCC	AGGCAAGGGA	CTGGAGTGGG	TCTCATACAT
	301	TAGTCAAGAT	GGTGATATAA	CCGACTATGC	AGACTCCGTA	AAGGGTCGAT
	351	TCACCATCTC	CAGAGACAAT	GCAAAGAACA	GCCTGTACCT	GCAAATGAAC
	401	AGCCTGAGGG	ACGAGGACAC	AGCCGTGTAT	TACTGTGCAA	GAGGCCTGGC
4.4	451	GGACGGGGCC	TGGTTTGCTT	ACTGGGGCCA	AGGGACTCTG	GTCACGGTCT
the State	501	CTTCCGCTAG	CACCAAGGGC	CCATCGGTCT	TCCCCCTGGC	ACCCTCCTCC
Lines Sent	551	AAGAGCACCT	CTGGGGGCAC	AGCGGCCCTG	GGCTGCCTGG	TCAAGGACTA
ting of the state of	601	CTTCCCCGAA	CCGGTGACGG	TGTCGTGGAA	CTCAGGCGCC	ĊTGACCAGCG
4 409.	651	GCGTGCACAC	CTTCCCGGCT	GTCCTACAGT	CCTCAGGACT	CTACTCCCTC
1	701	AGCAGCGTGG	TCACCGTGCC	CTCCAGCAGC	TTGGGCACCC	AGACCTACAT
4	751	CTGCAACGTG	AATCACAAGC	CCAGCAACAC	CAAGGTGGAC	AAGAAAGTTG
	801	GTGAGAGGCC	AGCACAGGGA	GGGAGGGTGT	CTGCTGGAAG	CCAGGCTCAG
	851	CGCTCCTGCC	TGGACGCATC	CCGGCTATGC	AGCCCCAGTC	CAGGGCAGCA
	901	AGGCAGGCCC	CGTCTGCCTC	TTCACCCGGA	GGCCTCTGCC	CGCCCCACTC
	951	ATGCTCAGGG	AGAGGGTCTT	CTGGCTTTTT	CCCCAGGCTC	TGGGCAGGCA
	1001	CAGGCTAGGT	GCCCCTAACC	CAGGCCCTGC	ACACAAAGGG	GCAGGTGCTG
	1051	GGCTCAGACC	TGCCAAGAGC	CATATCCGGG	AGGACCCTGC	CCCTGACCTA
	1101	AGCCCACCCC	AAAGGCCAAA	CTCTCCACTC	CCTCAGCTCG	GACACCTTCT
	1151	CTCCTCCCAG	ATTCCAGTAA	CTCCCAATCT	TCTCTCTGCA	GAGCCCAAAT
	1201	CTTGTGACAA	AACTCACACA	TGCCCACCGT	GCCCAGGTAA	GCCAGCCCAG
	1251	GCCTCGCCCT	CCAGCTCAAG	GCGGGACAGG	TGCCCTAGAG	TAGCCTGCAT
	1301	CCAGGGACAG	GCCCCAGCCG	GGTGCTGACA	CGTCCACCTC	CATCTCTTCC

235 237
TCAGCACCTG AACTCCTCGG GGGACCGTCA GTCTTCCTCT TCCCCCCAAA 1401 ACCCAAGGAC ACCCTCATGA TCTCCCGGAC CCCTGAGGTC ACATGCGTGG 1451 TGGTGGACGT GAGCCACGAA GACCCTGAGG TCAAGTTCAA CTGGTACGTG 1501 GACGGCGTGG AGGTGCATAA TGCCAAGACA AAGCCGCGGG AGGAGCAGTA CAACAGCACG TACCGTGTGG TCAGCGTCCT CACCGTCCTG CACCAGGACT 1551 GGCTGAATGG CAAGGAGTAC AAGTGCAAGG TCTCCAACAA AGCCCTCCCA 1601 GCCCCATCG AGAAAACCAT CTCCAAAGCC AAAGGTGGGA CCCGTGGGGT 1651 GCGAGGCCA CATGGACAGA GGCCGGCTCG GCCCACCCTC TGCCCTGAGA 1701 GTGACCGCTG TACCAACCTC TGTCCCTACA GGGCAGCCCC GAGAACCACA 1751 GGTGTACACC CTGCCCCCAT CCCGGGATGA GCTGACCAAG AACCAGGTCA 1801 GCCTGACCTG CCTGGTCAAA GGCTTCTATC CCAGCGACAT CGCCGTGGAG 1851 TGGGAGAGCA ATGGGCAGCC GGAGAACAAC TACAAGACCA CGCCTCCCGT 1901 GCTGGACTCC GACGGCTCCT TCTTCCTCTA CAGCAAGCTC ACCGTGGACA 1951 AGAGCAGGTG GCAGCAGGGG AACGTCTTCT CATGCTCCGT GATGCATGAG 2001 GCTCTGCACA ACCACTACAC GCAGAAGAGC CTCTCCCTGT CTCCGGGTAA 2051 ATGAGTGCGA CGGCCGGCAA GCCCCCGCTC CCCGGGCTCT CGCGGTCGCA 2101 CGAGGATGCT TGGCACGTAC CCCCTGTACA TACTTCCCGG GCGCCCAGCA 2151 TGGAAATAAA GCACCCAGCG CTGCCCTGGGG CCCCTGCGAG ACTGTGATGG 2201 TTCTTTCCAC GGGTCAGGCC GAGTCTGAGG CCTGAGTGGC ATGAGGGAGG 2251 CAGAGCGGGT CCCACTGTCC CCACACTGGC CCAGGCTGTG CAGGTGTGCC 2301 TGGGCCCCT AGGGTGGGC TCAGCCAGGG GCTGCCCTCG GCAGGGTGGG 2351 2401 CACGGGAAGC CCTAGGAGCC CCTGGGGACA GACACAGC CCCTGCCTCT 2451 GTAGGAGACT GTCCTGTTCT GTGAGCGCCC CTGTCCTCCC GACCTCCATG 2501 CCCACTCGGG GGCATGCCTA GTCCATGTGC GTAGGGACAG GCCCTCCCTC 2551 ACCCATCTAC CCCCACGGCA CTAACCCCTG GCTGCCCTGC CCAGCCTCGC 2601 ACCCGCATGG GGACACAACC GACTCCGGGG ACATGCACTC TCGGGCCCTG 2651 TGGAGGGACT GGTGCAGATG CCCACACAC CACTCAGCCC AGACCCGTTC 2701 AACAAACCCC GCACTGAGGT TGGCCGGCCA CACGGCCACC ACACACACAC 2751 GTGCACGCCT CACACACGGA GCCTCACCCG GGCGAACTGC ACAGCACCCA 2801

2851 GACCAGAGCA AGGTCCTCGC ACACGTGAAC ACTCCTCGGA CACAGGCCCC 2901 CACGAGCCCC ACGCGGCACC TCAAGGCCCA CGAGCCTCTC GGCAGCTTCT 2951 CCACATGCTG ACCTGCTCAG ACAAACCCAG CCCTCCTCTC ACAAGGGTGC 3001 CCCTGCAGCC GCCACACA CACAGGGGAT CACACACCAC GTCACGTCCC 3051 TGGCCCTGGC CCACTTCCCA GTGCCGCCCT TCCCTGCAGG ACGGATCAGC 3101 CTCGACTGTG CCTTCTAGTT GCCAGCCATC TGTTGTTTGC CCCTCCCCCG 3151 TGCCTTCCTT GACCCTGGAA GGTGCCACTC CCACTGTCCT TTCCTAATAA 3201 AATGAGGAAA TTGCATCGCA TTGTCTGAGT AGGTGTCATT CTATTCTGGG 3251 GGGTGGGGTG GGGCAGGACA GCAAGGGGGA GGATTGGGAA GACAATAGCA 3301 GGCATGCTGG GGATGCGGTG GGCTCTATGG CTTCTGAGGC GGAAAGAACC 3351 AGCTGGGGCT CTAGGGGGTA TCCCCACGCG CCCTGTAGCG GCGCATTAAG 3401 CGCGGCGGT GTGGTGGTTA CGCGCAGCGT GACCGCTACA CTTGCCAGCG 3451 CCCTAGCGCC CGCTCCTTTC GCTTTCTTCC CTTCCTTTCT CGCCACGTTC 3501 GCCGGGCCTC TCAAAAAAGG GAAAAAAGC ATGCATCTCA ATTAGTCAGC 3551 AACCATAGTC CCGCCCCTAA CTCCGCCCAT CCCGCCCCTA ACTCCGCCCA 3601 GTTCCGCCCA TTCTCCGCCC CATGGCTGAC TAATTTTTTT TATTTATGCA 3651 GAGGCCGAGG CCGCCTCGGC CTCTGAGCTA TTCCAGAAGT AGTGAGGAGG 3701 CTTTTTGGA GGCCTAGGCT TTTGCAAAAA GCTTGGACAG CTCAGGGCTG 3751 CGATTTCGCG CCAAACTTGA CGGCAATCCT AGCGTGAAGG CTGGTAGGAT TTTATCCCCG CTGCCATCAT GGTTCGACCA TTGAACTGCA TCGTCGCCGT 3801 3851 GTCCCAAAAT ATGGGGATTG GCAAGAACGG AGACCTACCC TGGCCTCCGC 3901 TCAGGAACGA GTTCAAGTAC TTCCAAAGAA TGACCACAAC CTCTTCAGTG 3951 GAAGGTAAAC AGAATCTGGT GATTATGGGT AGGAAAACCT GGTTCTCCAT TCCTGAGAAG AATCGACCTT TAAAGGACAG AATTAATATA GTTCTCAGTA 4001 GAGAACTCAA AGAACCACCA CGAGGAGCTC ATTTTCTTGC CAAAAGTTTG 4051 GATGATGCCT TAAGACTTAT TGAACAACCG GAATTGGCAA GTAAAGTAGA 4101 CATGGTTTGG ATAGTCGGAG GCAGTTCTGT TTACCAGGAA GCCATGAATC 4201 AACCAGGCCA CCTTAGACTC TTTGTGACAA GGATCATGCA GGAATTTGAA 4251 AGTGACACGT TTTTCCCAGA AATTGATTTG GGGAAATATA AACTTCTCCC AGAATACCCA GGCGTCCTCT CTGAGGTCCA GGAGGAAAAA GGCATCAAGT 4301

4351 ATAAGTTTGA AGTCTACGAG AAGAAAGACT AACAGGAAGA TGCTTTCAAG TTCTCTGCTC CCCTCCTAAA GCTATGCATT TTTATAAGAC CATGGGACTT 4401 TTGCTGGCTT TAGATCTCTT TGTGAAGGAA CCTTACTTCT GTGGTGTGAC 4451 4501 ATAATTGGAC AAACTACCTA CAGAGATTTA AAGCTCTAAG GTAAATATAA 4551 AATTTTTAAG TGTATAATGT GTTAAACTAC TGATTCTAAT TGTTTGTGTA TTTTAGATTC CAACCTATGG AACTGATGAA TGGGAGCAGT GGTGGAATGC 4601 4651 CTTTAATGAG GAAAACCTGT TTTGCTCAGA AGAAATGCCA TCTAGTGATG 4701 ATGAGGCTAC TGCTGACTCT CAACATTCTA CTCCTCCAAA AAAGAAGAGA 4751 AAGGTAGAAG ACCCCAAGGA CTTTCCTTCA GAATTGCTAA GTTTTTTGAG 4851 CAAAGGAAAA AGCTGCACTG CTATACAAGA AAATTATGGA AAAATATTCT 4901 GTAACCTTTA TAAGTAGGCA TAACAGTTAT AATCATAACA TACTGTTTTT TCTTACTCCA CACAGGCATA GAGTGTCTGC TATTAATAAC TATGCTCAAA 4951 5001 AATTGTGTAC CTTTAGCTTT TTAATTTGTA AAGGGGTTAA TAAGGAATAT 5051 TTGATGTATA GTGCCTTGAC TAGAGATCAT AATCAGCCAT ACCACATTTG 5101 TAGAGGTTTT ACTTGCTTTA AAAAACCTCC CACACCTCCC CCTGAACCTG 5151 AAACATAAAA TGAATGCAAT TGTTGTTGTT AACTTGTTTA TTGCAGCTTA 5201 TAATGGTTAC AAATAAAGCA ATAGCATCAC AAATTTCACA AATAAAGCAT 5251 TTTTTCACT GCATTCTAGT TGTGGTTTGT CCAAACTCAT CAATGTATCT 5301 TATCATGTCT GGATCGGCTG GATGATCCTC CAGCGCGGGG ATCTCATGCT 5351 GGAGTTCTTC GCCCACCCCA ACTTGTTTAT TGCAGCTTAT AATGGTTACA 5401 AATAAAGCAA TAGCATCACA AATTTCACAA ATAAAGCATT TTTTTCACTG 5451 CATTCTAGTT GTGGTTTGTC CAAACTCATC AATGTATCTT ATCATGTCTG TATACCGTCG ACCTCTAGCT AGAGCTTGGC GTAATCATGG TCATAGCTGT 5501 5551 TTCCTGTGTG AAATTGTTAT CCGCTCACAA TTCCACAA CATACGAGCC 5601 GGAAGCATAA AGTGTAAAGC CTGGGGTGCC TAATGAGTGA GCTAACTCAC 5651 ATTAATTGCG TTGCGCTCAC TGCCCGCTTT CCAGTCGGGA AACCTGTCGT 5701 GCCAGCTGCA TTAATGAATC GGCCAACGCG CGGGGAGAGG CGGTTTGCGT 5751 ATTGGGCGCT CTTCCGCTTC CTCGCTCACT GACTCGCTGC GCTCGGTCGT 5801 TCGGCTGCGG CGAGCGGTAT CAGCTCACTC AAAGGCGGTA ATACGGTTAT

5351 CCACAGAATC AGGGGATAAC GCAGGAAAGA ACATGTGAGC AAAAGGCCAG 5901 CAAAAGGCCA GGAACCGTAA AAAGGCCGCG TTGCTGGCGT TTTTCCATAG 5951 GCTCCGCCCC CCTGACGAGC ATCACAAAAA TCGACGCTCA AGTCAGAGGT 6001 GGCGAAACCC GACAGGACTA TAAAGATACC AGGCGTTTCC CCCTGGAAGC TCCCTCGTGC GCTCTCCTGT TCCGACCCTG CCGCTTACCG GATACCTGTC 6051 6101 CGCCTTTCTC CCTTCGGGAA GCGTGGCGCT TTCTCAATGC TCACGCTGTA 6151 GGTATCTCAG TTCGGTGTAG GTCGTTCGCT CCAAGCTGGG CTGTGTGCAC 6201 GAACCCCCCG TTCAGCCCGA CCGCTGCGCC TTATCCGGTA ACTATCGTCT TGAGTCCAAC CCGGTAAGAC ACGACTTATC GCCACTGGCA GCAGCCACTG 6301 GTAACAGGAT TAGCAGAGCG AGGTATGTAG GCGGTGCTAC AGAGTTCTTG 6351 AAGTGGTGGC CTAACTACGG CTACACTAGA AGGACAGTAT TTGGTATCTG 6401 CGCTCTGCTG AAGCCAGTTA CCTTCGGAAA AAGAGTTGGT AGCTCTTGAT 6451 CCGGCAAACA AACCACCGCT GGTAGCGGTG GTTTTTTTGT TTGCAAGCAG 6501 CAGATTACGC GCAGAAAAA AGGATCTCAA GAAGATCCTT TGATCTTTTC TACGGGGTCT GACGCTCAGT GGAACGAAAA CTCACGTTAA GGGATTTTGG 6551 TCATGAGATT ATCAAAAAGG ATCTTCACCT AGATCCTTTT AAATTAAAAA 6601 6651 TGAAGTTTTA AATCAATCTA AAGTATATAT GAGTAAACTT GGTCTGACAG 6701 TTACCAATGC TTAATCAGTG AGGCACCTAT CTCAGCGATC TGTCTATTTC 6751 GTTCATCCAT AGTTGCCTGA CTCCCCGTCG TGTAGATAAC TACGATACGG 6801 GAGGGCTTAC CATCTGGCCC CAGTGCTGCA ATGATACCGC GAGACCCACG 6851 CTCACCGGCT CCAGATTTAT CAGCAATAAA CCAGCCAGCC GGAAGGGCCG 6901 AGCGCAGAAG TGGTCCTGCA ACTTTATCCG CCTCCATCCA GTCTATTAAT TGTTGCCGGG AAGCTAGAGT AAGTAGTTCG CCAGTTAATA GTTTGCGCAA 6951 CGTTGTTGCC ATTGCTACAG GCATCGTGGT GTCACGCTCG TCGTTTGGTA 7001 TGGCTTCATT CAGCTCCGGT TCCCAACGAT CAAGGCGAGT TACATGATCC 7051 CCCATGTTGT GCAAAAAGC GGTTAGCTCC TTCGGTCCTC CGATCGTTGT 7101 CAGAAGTAAG TTGGCCGCAG TGTTATCACT CATGGTTATG GCAGCACTGC 7151 ATAATTCTCT TACTGTCATG CCATCCGTAA GATGCTTTTC TGTGACTGGT 7201 7251 GAGTACTCAA CCAAGTCATT CTGAGAATAG TGTATGCGGC GACCGAGTTG CTCTTGCCCG GCGTCAATAC GGGATAATAC CGCGCCACAT AGCAGAACTT 7301

7351 TAAAAGTGCT CATCATTGGA AAACGTTCTT CGGGGCGAAA ACTCTCAAGG 7401 ATCTTACCGC TGTTGAGATC CAGTTCGATG TAACCCACTC GTGCACCCAA 7451 CTGATCTTCA GCATCTTTTA CTTTCACCAG CGTTTCTGGG TGAGCAAAAA 7501 CAGGAAGGCA AAATGCCGCA AAAAAGGGAA TAAGGGCGAC ACGGAAATGT 7551 TGAATACTCA TACTCTTCCT TTTTCAATAT TATTGAAGCA TTTATCAGGG 7601 TTATTGTCTC ATGAGCGGAT ACATATTTGA ATGTATTTAG AAAAATAAAC 7651 AAATAGGGGT TCCGCGCACA TTTCCCCGAA AAGTGCCACC TGACGTCGAC 7701 GGATCGGGAG ATCTGCTAGG TGACCTGAGG CGCCCGGCT TCGAATAGCC AGAGTAACCT TTTTTTTTAA TTTTATTTTA TTTTATTTTT GAGATGGAGT 7751 TTGGCGCCGA TCTCCCGATC CCCTATGGTC GACTCTCAGT ACAATCTGCT 7801 7851 CTGATGCCGC ATAGTTAAGC CAGTATCTGC TCCCTGCTTG TGTGTTGGAG 7901 GTCGCTGAGT AGTGCGCGAG CAAAATTTAA GCTACAACAA GGCAAGGCTT 7951 GACCGACAAT TGCATGAAGA ATCTGCTTAG GGTTAGGCGT TTTGCGCTGC TTCGCGATGT ACGGGCCAGA TATACGCGTT GACATTGATT ATTGACTAGT 8001 TATTAATAGT AATCAATTAC GGGGTCATTA GTTCATAGCC CATATATGGA 8051 GTTCCGCGTT ACATAACTTA CGGTAAATGG CCCGCCTGGC TGACCGCCCA 8101 ACGACCCCG CCCATTGACG TCAATAATGA CGTATGTTCC CATAGTAACG 8151 CCAATAGGGA CTTTCCATTG ACGTCAATGG GTGGACTATT TACGGTAAAC 8201 TGCCCACTTG GCAGTACATC AAGTGTATCA TATGCCAAGT ACGCCCCCTA 8251 TTGACGTCAA TGACGGTAAA TGGCCCGCCT GGCATTATGC CCAGTACATG 8301 ACCTTATGGG ACTTTCCTAC TTGGCAGTAC ATCTACGTAT TAGTCATCGC 8351 TATTACCATG GTGATGCGGT TTTGGCAGTA CATCAATGGG CGTGGATAGC 8401 GGTTTGACTC ACGGGGATTT CCAAGTCTCC ACCCCATTGA CGTCAATGGG 8451 8501 AGTTTGTTTT GGCACCAAAA TCAACGGGAC TTTCCAAAAT GTCGTAACAA 8551 CTCCGCCCCA TTGACGCAAA TGGGCGGTAG GCGTGTACGG TGGGAGGTCT 8601 ATATAAGCAG AGCTCTCTGG CTAACTAGAG AACCCACTGC TTACTGGCTT 8651 ATCGAAATTA ATACGACTCA CTATAGGGAG ACCCAAGCTT

# CETURO. ECECTOR

FIGURE 19 A

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60	120	180	240	300	360	420	480	540	600
GGTCAATCGA	CCTGGCACCC	GGACTACTTC	GCACACCTTC	CGTGCCCTCC	CAACACCAAG	TGGAAGCCAG	GCAGCAAGGC	TCAGGGAGAG	CTAACCCAGG
CCAGTTAGCT	GGACCGTGGG	CCTGATGAAG	CGTGTGGAAG	GCACGGGAGG	GT'TGTGGTTC	ACCTTCGGTC	CGTCGTTCCG	AGTCCCTCTC	GATTGGGTCC
50 CTAGATAACC GATCTATTGG	110 CGGTCTTCCC GCCAGAAGGG	GCCCTGGGCT GCCTGGTCAA CGGGACCCGA CGGACCAGTT	230 CCAGCGGCGT GGTCGCCGCA	290 GCGTGGTCAC CGCACCAGTG	350 ACAAGCCCAG TGTTCGGGTC	410 GGGTGTCTGC CCCACAGACG	470 CCAGTCCAGG GGTCAGGTCC	530 CCACTCATGC GGTGAGTACG	590 CTAGGTGCCC GATCCACGGG
40 TCTCGAGTCT AGAGCTCAGA	AAGGGCCCAT TTCCCGGGTA	160 GCCCTGGGCT CGGGACCCGA	220 GGCGCCCTGA CCGCGGGACT	280 TCCCTCAGCA AGGGAGTCGT	340 AACGTGAATC TTGCACTTAG	400 CAGGGAGGGA GTCCCTCCCT	460 CTATGCAGCC GATACGTCGG	520 TCTGCCCGCC AGACGGGCGG	580 CAGGCACAGG GTCCGTGTCC
30	90	150	210	270	330	390	450	510	570
TCTCCTTAGG	TGCTAGCACC	GGGCACAGCG	GTGGAACTCA	AGGACTCTAC	CTACATCTGC	GAGGCCAGCA	CGCATCCCGG	CCCGGAGGCC	AGGCTCTGGG
AGAGGAATCC	ACGATCGTGG	CCCGTGTCGC	CACCTTGAGT	TCCTGAGATG	GATGTAGACG	CTCCGGTCGT	GCGTAGGGCC	GGGCCTCCGG	TCCGAGACCC
20	80	140	200	260	320	380	440	500	560
TAAATTGATA	TGCGGCCGCT	GCACCTCTGG	TGACGGTGTC	TACAGTCCTC	GCACCCAGAC	AAGTTGGTGA	CCTGCCTGGA	TGCCTCTTCA	CTTTTTCCCC
ATTTAACTAT	ACGCCGGCGA	CGTGGAGACC	ACTGCCACAG	ATGTCAGGAG	CGTGGGTCTG	TTCAACCACT	GGACGGACCT	ACGGAGAAGT	GAAAAGGGG
10	70	130	190	250	310	370	430	490	550
GGTACCAATT	TTGGAATTCT	TCCTCCAAGA	CCCGAACCGG	CCGGCTGTCC	AGCAGCTTGG	GTGGACAAGA	GCTCAGCGCT	AGGCCCCGTC	GGTCTTCTGG
CCATGGTTAA	AACCTTAAGA	AGGAGGTTCT	GGGCTTGGCC	GGCCGACAGG	TCGTCGAACC	CACCTGTTCT	CGAGTCGCGA	TCCGGGGCAG	CCAGAAGACC

# CELCEC ESECTOR

## pD17-hG1b

FIGURE 19B

660 TCCGGGAGGA AGGCCCTCCT	720 AGCTCGGACA TCGAGCCTGT	780 CCAAATCTTG GGTTTAGAAC	840 CGCCCTCCAG GCGGGAGGTC	900 CAGCCGGGTG GTCGGCCCAC	235 950234 960 deresegga cercaerer deaceceer secagreasa	1020 GAGGTCACAT CTCCAGTGTA	1080 TACGTGGACG ATGCACCTGC	AGCACG' TCGTGC	318 1200 GAGTACAAGT CTCATGTTGA
650 AAGAGCCATA TTCTCGGTAT	710 CCACTCCCTC GGTGAGGGAG	770 TCTGCAGAGC AGACGTCTCG	830 GCCCAGGCCT CGGGTCCGGA	890 GGACAGGCCC CCTGTCCGGG		1010 CCGGACCCCT GGCCTGGGGA	1070 GTTCAACTGG CAAGTTGACC	1130 GCAGTACAAC CGTCATGTTG	1190 GAATGGCAAG
640	700	760	820	880	940	1000	1060	1120	1180
CAGACCTGCC	GCCAAACTCT	CAATCTTCTC	AGGTAAGCCA	CTGCATCCAG	CACCTGAACT	TCATGATCTC	CTGAGGTCAA	CGCGGGAGGA	AGGACTGGCT
GTCTGGACGG	CGGTTTGAGA	GTTAGAAGAG	TCCATTCGGT	GACGTAGGTC	GTGGACTTGA	AGTACTAGAG	GACTCCAGTT	GCGCCCTCCT	TCCTGACCGA
630	690	750	810	870	930	990	1050	1110	1170
GTGCTGGGCT	CACCCCAAAG	CAGTAACTCC	CACCGTGCCC	CTAGAGTAGC	TCTTCCTCAG	AAGGACACCC	CACGAAGACC	AAGACAAAGC	GTCCTGCACC
CACGACCCGA	GTGGGGTTTC	GTCATTGAGG	GTGGCACGGG	GATCTCATCG	AGAAGGAGTC	TTCCTGTGGG	GTGCTTCTGG	TTCTGTTTTCG	CAGGACGTGG
620	680	740	800	860	920	980	1040	1100	
AAAGGGGCAG	GACCTAAGCC	TCCCAGATTC	CACACATGCC	GACAGGTGCC	CACCTCCATC	CCCAAAACCC	GGACGTGAGC	GCATAATGCC	
TTTCCCCGTC	CTGGATTCGG	AGGGTCTAAG	GTGTGTACGG	CTGTCCACGG	GTGGAGGTAG	GGGTTTTGGG	CCTGCACTCG	CGTATTACGG	
610	670	730	790	850	910	970	1030	1090	1150
CCCTGCACAC	CCCTGCCCCT	CCTTCTCTCC	TGACAAAACT	CTCAAGGCGG	CTGACACGTC	TCCTCTTCCC	GCGTGGTGGT	GCGTGGAGGT	GTGTGGTCAG
GGGACGTGTG	GGGACGGGGA	GGAAGAGAGG	ACTGTTTTGA	GAGTTCCGCC	GACTGTGCAG	AGGAGAAGGG	CGCACCACCA	CGCACCTCCA	CACACCAGTC

### pD17-hG1b

1860	1920	1980	2040	2100	2160	2220	2280	2340	2400
CTGAGGCCTG	GCTGTGCAGG	GGTGGGGGAT	GGAAGCCCTA	TGTTCTGTGA	GCGGTGGGCT	CACGCGCCCT	GCTACACTTG	ACGTTCGCCG	AGTGCTTTAC
GACTCCGGAC	CGACACGTCC	CCACCCCTA	CCTTCGGGAT	ACAAGACACT	CGCCACCCGA	GTGCGCGGGA	CGATGTGAAC	TGCAAGCGGC	TCACGAAATG
1850	1910	1970	2030	2090	2150	2210	2270	2330	2390
CAGGCCGAGT	ACTGGCCCAG	CCCTCGGCAG	CTGGGCCACG	GAGACTGTCC	TGCTGGGGAT	GGGGTATCCC	CAGCGTGACC	CTTTCTCGCC	GTTCCGATTT
GTCCGGCTCA	TGACCGGGTC	GGGAGCCGTC	GACCCGGTGC	CTCTGACAGG	ACGACCCCTA	CCCCATAGGG	GTCGCACTGG	GAAAGAGCGG	CAAGGCTAAA
1840	1900	1960	2020	2080	2140	2200	2260	2320	2380
TTCCACGGGT	CTGTCCCCAC	CCAGGGGCTG	CTGCCCTGGG	GCCTCTGTAG	CTCGGGGGCA	GGGCTCTAG	TGGTTACGCG	TCTTCCCTTC	TCCCTTTAGG
AAGGTGCCCA	GACAGGGGTG	GGTCCCCGAC	GACGGGACCC	CGGAGACATC	GAGCCCCCGT	CCCCGAGATC	ACCAATGCGC	AGAAGGGAAG	AGGGAAATCC
1830	1890	1950	2010	2070	2130	2190	2250	2310	2370
TGATGGTTCT	GCGGGTCCCA	TGGGGCTCAG	CCAGCAGCAC	CACAGCCCCT	TCCATGCCCA	AGAACCAGCT	GCGGGTGTGG	CCTTTCGCTT	AATCGGGGCA
ACTACCAAGA	CGCCCAGGGT	ACCCCGAGTC	GGTCGTCGTG	GTGTCGGGGA	AGGTACGGGT	TCTTGGTCGA	CGCCCACACC	GGAAAGCGAA	TTAGCCCCGT
1820	1880	1940	2000	2060	2120	2180	2240	2300	2360
TGCGAGACTG	GGGAGGCAGA	CCCCCTAGGG	GGCCCTCCCT	GGGACAGACA	CCTCCCGACC	TGAGGCGGAA	ATTAAGCGCG	AGCGCCCGCT	TCAAGCTCTA
ACGCTCTGAC	CCCTCCGTCT	GGGGGATCCC	CCGGGAGGGA	CCCTGTCTGT	GGAGGGCTGG	ACTCCGCCTT	TAATTCGCGC	TCGCGGGCGA	AGTTCGAGAT
1810	1870	1930	1990	2050	2110	2170	2230	2290	2350
CCTGGGCCCC	AGTGGCATGA	TGTGCCTGGG	TTGCCAGCGT	GGAGCCCCTG	GCGCCCCTGT	CTATGGCTTC	GTAGCGCCGC	CCAGCGCCCT	GCTTTCCCCG
GGACCCGGGG	TCACCGTACT	ACACGGACCC	AACGGTCGCA	CCTCGGGGAC	CGCGGGGACA	GATACCGAAG	CATCGCCGCG	GGTCGCGGGA	CGAAAGGGGC

						•			•
1260	1320	1380	1440	1500	1560	1620	1680	1740	1800
AAAGCCAAAG	ACCCTCTGCC	ACCACAGGTG	GACCTGCCTG	GCAGCCGGAG	CCTCTACAGC	CTCCGTGATG	GGGTAAATGA	GATGCTTGGC	CCAGCGCTGC
TTTCGGTTTC	TGGGAGACGG	TGGTGTCCAC	CTGGACGGAC	CGTCGGCCTC	GGAGATGTCG	GAGGCACTAC	CCCATTTACT	CTACGAACCG	GGTCGCGACG
1250 AACCATCTCC TTGGTAGAGG	1310 GGCTCGGCCC CCGAGCCGGG	1380 AGCCCCGAGA ACCACAGGTG TCGGGGCTCT TGGTGTCCAC	ACCAAGAACC AGGTCAGCCT TGGTTCTTGG TCCAGTCGGA	1490 AGAGCAATGG TCTCGTTACC	1550 GCTCCTTCTT CGAGGAAGAA	1610 TCTTCTCATG AGAAGAGTAC	1670 CCCTGTCTCC GGGACAGAGG	1730 GTCGCACGAG CAGCGTGCTC	1790 AATAAAGCAC TTATTTCGTG
CTCCCAGCOC CCATCGAGAA GAGGGTCGGG GGITAGCTCTT	1300 GACAGAGGCC CTGTCTCCGG	1360 CCTACAGGGC GGATGTCCCG	1420 ACCAAGAACC TGGTTCTTGG	1480 GTGGAGTGGG CACCTCACCC	1540 GACTCCGACG CTGAGGCTGC	1600 CAGGGGAACG GTCCCCTTGC	1660 AAGAGCCTCT TTCTCGGAGA	1720 GGCTCTCGCG CCGAGAGCGC	1780 CCAGCATGGA GGTCGTACCT
123033/	1290	1350	1410	1470	1530	1590	1650	1710	1770
CTCCCAGCCC CO	GGGCCACATG	AACCTCTGTC	GGATGAGCTG	CGACATCGCC	TCCCGTGCTG	CAGGTGGCAG	CTACACGCAG	CCGCTCCCCG	TCCCGGGCGC
GAGGGTCGGG G	CCCGGTGTAC	TTGGAGACAG	CCTACTCGAC	GCTGTAGCGG	AGGGCACGAC	GTCCACCGTC	GATGTGCGTC	GGCGAGGGGC	AGGGCCCGCG
1220	1280	1340	1400	1460	1520	1580	1640	1700	1760
CAACAAAGCC	TGGGGTGCGA	CCGCTGTACC	CCCCATCCCG	TCTATCCCAG	AGACCACGCC	TGGACAAGAG	TGCACAACCA	CGGCAAGCCC	TGTACATACT
GTTGTTTCGG	ACCCCACGCT	GGCGACATGG	GGGGTAGGC	AGATAGGGTC	TCTGGTGCGG	ACCTGTTCTC	ACGTGTTGGT	GCCGTTCGGG	ACATGTATGA
312 1210	1270	1330	1390	1450	1510	1570	1630	1690	1750
GCAAGGTCTC	GTGGGACCCG	CTGAGAGTGA	TACACCCTGC	GTCAAAGGCT	AACAACTACA	AAGCTCACCG	CATGAGGCTC	GTGCGACGGC	ACGTACCCCC
CGTTCCAGAG	CACCCTGGGC	GACTCTCACT	ATGTGGGACG	CAGTTTCCGA	TTGTTGATGT	TTCGAGTGGC	GTACTCCGAG	CACGCTGCCG	TGCATGGGGG

# DESCEES, CELLOY

## FIGURE 19E

2460	2520	2580	2640	2700	2760	2820	2880	2940	3000
CCATCGCCCT	GGACTCTTGT	TAAGGGATTT	AACGCGAATT	CAGGCAGGCA	CTAACTCCGC	TGACTAATTT	AAGTAGTGAG	GCTGCGATTT	CCCGCTGCCA
GGTAGCGGGA	CCTGAGAACA	ATTCCCTAAA	TTGCGCTTAA	GTCCGTCCGT	GATTGAGGCG	ACTGATTAAA	TTCATCACTC	CGACGCTAAA	GGGCGACGGT
2450	2510	2570	2630	2690	2750	2810	2870	2930	2990
ACGTAGTGGG	CTTTAATAGT	TTTTGATTTA	ACAAAAATTT	CCAGGCTCCC	AGTCCCGCCC	GCCCCATGGC	GCTATTCCAG	ACAGCTCAGG	GGATTTTATC
TGCATCACCC	GAAATTATCA	AAAACTAAAT	TGTTTTTAAA	GGTCCGAGGG	TCAGGGCGGG	CGGGGTACCG	CGATAAGGTC	TGTCGAGTCC	CCTAAAATAG
2440	2500	2560	2620	2680	2740	2800	2860	2920	2980
GTGATGGTTC	AGTCCACGTT	CGGTCTATTC	AGCTGATTTA	TGGAAAGTCC	CAGCAACCAT	CCCATTCTCC	CGGCCTCTGA	AAAAGCTTGG	AAGGCTGGTA
CACTACCAAG	TCAGGTGCAA	GCCAGATAAG	TCGACTAAAT	ACCTTTCAGG	GTCGTTGGTA	GGGTAAGAGG	GCCGGAGACT	TTTTCGAACC	TTCCGACCAT
2430	2490	2550	2610	2670	2730	2790	2850	2910	2970
CTTGATTAGG	TTGACGTTGG	AACCCTATCT	TTAAAAAATG	AGTTAGGGTG	CTCAATTAGT	CCCAGTTCCG	GAGGCCGCCT	GGCTTTTGCA	TCCTAGCGTG
GAACTAATCC	AACTGCAACC	TTGGGATAGA	AATTTTTAC	TCAATCCCAC	GAGTTAATCA	GGGTCAAGGC	CTCCGGCGGA	CCGAAAACGT	AGGATCGCAC
2420	2480	2540	2600	2660	2720	2780	2840	2900	2960
CCCCAAAAAA	TTTTCGCCCT	AACAACACTC	GGCCTATTGG	AATGTGTGTC	AAGCATGCAT	CCTAACTCCG	TGCAGAGGCC	TGGAGGCCTA	TTGACGCCAA
GGGGTTTTTTT	AAAAGCGGGA	TTGTTGTGAG	CCGGATAACC	TTACACACAG	TTCGTACGTA	GGATTGAGGC	ACGTCTCCGG	ACCTCCGGAT	AACTGCCGTT
2410	2470	2530	2590	2650	2710	2770	2830	2890	2950
GGCACCTCGA	GATAGACGGT	TCCAAAC'TGG	TGGGGATTTC	AATTCTGTGG	GAAGTATGCA	CCATCCCGCC	TYTYTATYTA	GAGGCTTTTT	CGCGCCAAAC
CCGTGGAGCT	CTATCTGCCA	AGGTTTGACC	ACCCCTAAAG	TTAAGACACC	CTTCATACGT	GGTAGGGCGG	AAAAATAAAT	CTCCGAAAAA	GCGCGGTTTG

# CHECKERS THE CHECK

## FIGURE 19F

3060	3120	3180	3240	3300	3360	3420	3480	3540	3600
ATTGGCAAGA	AGAATGACCA	ACCTGGTTCT	AGTAGAGAAC	GCCTTAAGAC	GGAGGCAGTT	ACAAGGATCA	TATAAACTTC	AAGTATAAGT	GCTCCCCTCC
TAACCGTTCT	TCTTACTGGT	TGGACCAAGA	TCATCTCTTG	CGGAATTCTG	CCTCCGTCAA	TGTTCCTAGT	ATATTTGAAG	TTCATATTCA	CGAGGGGAGG
3050	3110	3170	3230	3290	3350	3410	3470	3530	3590
AAATATGGGG	GTACTTCCAA	GGGTAGGAAA	TATAGTTCTC	TTTGGATGAT	TTGGATAGTC	ACTCTTTGTG	TTTGGGGAAA	AAAAGGCATC	CAAGTTCTCT
TTTATACCCC	CATGAAGGTT	CCCATCCTTT	ATATCAAGAG	AAACCTACTA	AACCTATCAG	TGAGAAACAC	AAACCCCTTT	TTTTCCGTAG	GTTCAAGAGA
3040	3100	3160	3220	3280	3340	3400	3460	3520	3580
CCGTGTCCCA	ACGAGTTCAA	TGGTGATTAT	ACAGAATTAA	TTGCCAAAAG	TAGACATGGT	GCCACCTTAG	CAGAAATTGA	TCCAGGAGGA	AAGATGCTTT
GGCACAGGGT	TGCTCAAGTT	ACCACTAATA	TGTCTTAATT	AACGGTTTTC	ATCTGTACCA	CGGTGGAATC	GTCTTTAACT	AGGTCCTCCT	TTCTACGAAA
3030	3090	3150	3210	3270	3330	3390	3450	3500 3510 CCCAGGCGTC CTCTCTGAGG GGGTCCGCAG GAGAGACTCC	3570
TGCATCGTCG	CCGCTCAGGA	AAACAGAATC	CCTTTAAAGG	GCTCATTTTC	GCAAGTAAAG	AATCAACCAG	ACGTTTTTCC		GACTAACAGG
ACGTAGCAGC	GGCGAGTCCT	TTTGTCTTAG	GGAAATTTCC	CGAGTAAAAG	CGTTCATTTC	TTAGTTGGTC	TGCAAAAAGG		CTGATTGTCC
3020	3080	3140	3200	3260	3320	3380	3440		3560
ACCATTGAAC	ACCCTGGCCT	AGTGGAAGGT	GAAGAATCGA	ACCACGAGGA	ACCGGAATTG	GGAAGCCATG	TGAAAGTGAC		CGAGAAGAAA
TGGTAACTTG	TGGGACCGGA	TCACCTTCCA	CTTCTTAGCT	TGGTGCTCCT	TGGCCTTAAC	CCTTCGGTAC	ACTTTCACTG		GCTCTTCTTT
3010	3070	3130	3190	3250	3310	3370	3430	3490	3550
TCATGGTTCG	ACGGAGACCT	CAACCTCTTC	CCATTCCTGA	TCAAAGAACC	TTATTGAACA	CTGTTTACCA	TGCAGGAATT	TCCCAGAATA	TTGAAGTCTA
AGTACCAAGC	TGCCTCTGGA	GTTGGAGAAG	GGTAAGGACT	AGTTTCTTGG	AATAACTTGT	GACAAATGGT	ACGTCCTTAA	AGGGTCTTAT	AACTTCAGAT

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3660	3710	3780	3840	3900	3960	4020	4080	4140	4200
TCTTTGTGAA	CCTACAGAGA TTTAAAGCTC	TAATTGTTTG	ATGCCTTTAA	CTACTGCTGA	AGGACTTTCC	TTGCTTGCTT	TGGAAAAATA	TTTTTCTTAC	GTACCTTTAG
AGAAACACTT	GGATGTCTCT AAATTTCGAG	ATTAACAAAC	TACGGAAATT	GATGACGACT	TCCTGAAAGG	AACGAACGAA	ACCTTTTTAT	AAAAGAATG	CATGGAAATC
3650		3770	3830	3890	3950	4010	4070	4130	4190
GCTTTAGATC		CTACTGATTC	CAGTGGTGGA	GATGATGAGG	GAAGACCCCA	AATAGAACTC	AAGAAAATTA	AACATACTGT	CAAAAATTGT
CGAAATCTAG		GATGACTAAG	GTCACCACCT	CTACTACTCC	CTTCTGGGGT	TTATCTTGAG	TTCTTTTAAT	TTGTATGACA	GTTTTAACA
3640	3700	3760	3820	3880	3940	4000	4060	4120	4180
ACTTTTGCTG	GGACAAACTA	ATGTGTTAAA	TGAATGGGAG	GCCATCTAGT	GAGAAAGGTA	TGTGTTTAGT	ACTGCTATAC	TTATAATCAT	TAACTATGCT
TGAAAACGAC	CCTGTTTGAT	TACACAATTT	ACTTACCCTC	CGGTAGATCA	CTCTTTCCAT	ACACAAATCA	TGACGATATG	AATATTAGTA	ATTGATACGA
3630	3690	3750	3810	3870	3930	3990	4050	4110	4170
AGACCATGGG	TGACATAATT	TAAGTGTATA	ATGGAACTGA	CAGAAGAAAT	CAAAAAAGAA	TGAGTCATGC	AAAAAGCTGC	GGCATAACAG	CTGCTATTAA
TCTGGTACCC	ACTGTATTAA	ATTCACATAT	TACCTTGACT	GTCTTCTTTA	GTTTTTTCTT	ACTCAGTACG	TTTTTCGACG	CCGTATTGTC	GACGATAATT
3620	3680	3740	3800	3860 3870	3920	3980	4040	4100	4160
CATTTTTATA	TTCTGTGGTG	ATAAAATTTT	ATTCCAACCT	CTGTTTTGCT CAGAAGAAT	TCTACTCCTC	CTAAGTTTTT	ACCACAAAGG	TTTATAAGTA	CATAGAGTGT
GTAAAAATAT	AAGACACCAC	TATTTTAAAA	TAAGGTTGGA	GACAAAACGA GTCTTCTTTA	AGATGAGGAG	GATTCAAAAA	TGGTGTTTCC	AAATATTCAT	GTATCTCACA
3610	3670	3730	3790	3850	3910	3970	4030	4090	4150
TAAAGCTATG	GGAACCTTAC	TAAGGTAAAT	TGTATTTTAG	TGAGGAAAAC	CTCTCAACAT	TTCAGAATTG	TGCTATTTAC	TTCTGTAACC	TCCACACAGG
ATTTCGATAC	CCTTGGAATG	ATTCCATTTA	ACATAAAATC	ACTCCTTTTG	GAGAGTTGTA	AAGTCTTAAC	ACGATAAATG	AAGACATTGG	AGGTGTGTCC

# CESCESS "CECLS"

## FIGURE 19H

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4260	4320	4380	4440	4500	4560	4620	4680	4740	4800
TGACTAGAGA	CTCCCACACC	TTTATTGCAG	GCATTTTTTT	GTCTGGATCG	CCCAACTTGT	ACAAATAAAG	TCTTATCATG	CTGTTTCCTG	ATAAAGTGTA
ACTGATCTCT	GAGGGTGTGG	AAATAACGTC	CGTAAAAAA	CAGACCTAGC	GGGTTGAACA	TGTTTATTTC	AGAATAGTAC	GACAAAGGAC	TATTTCACAT
4250'	4310	4370	4430	4490	4550	4610	4670	4730	4790
TATAGTGCCT	TTTAAAAAAC	TGTTAACTTG	CACAAATAAA	ATCTTATCAT	CTTCGCCCAC	CACAAATTTC	CATCAATGTA	ATGGTCATAG	AGCCGGAAGC
ATATCACGGA	AAATTTTTTG	ACAATTGAAC	GTGTTTATTT	TAGAATAGTA	GAAGCGGGTG	GTGTTTAAAG	GTAGTTACAT	TACCAGTATC	TCGGCCTTCG
4240	4300	4360	4420	4480	4540	4600	4660	4720	4780
ATATTTGATG	TTTTACTTGC	CAATTGTTGT	TCACAAATTT	TCATCAATGT	TGCTGGAGTT	GCAATAGCAT	TGTCCAAACT	TGGCGTAATC	ACAACATACG
TATAAACTAC	AAAATGAACG	GTTAACAACA	AGTGTTTAAA	AGTAGTTACA	ACGACCTCAA	CGTTATCGTA	ACAGGTTTGA	ACCGCATTAG	TGTTGTATGC
4230	4290	4350	4410	4470	4530	4590	4650	4710	4770
TTAATAAGGA	TTTGTAGAGG	AAAATGAATG	AGCAATAGCA	TTGTCCAAAC	GGGGATCTCA	TACAAATAAA	AGTTGTGGTT	AGCTAGAGCT	ACAATTCCAC
AATTATTCCT	AAACATCTCC	TTTTACTTAC	TCGTTATCGT	AACAGGTTTG	CCCCTAGAGT	ATGTTTATTT	TCAACACCAA	TCGATCTCGA	TGTTAAGGTG
4220	4280	4340	4400	4460	4520	4580	4640	4700	4760
TGTAAAGGGG	CCATACCACA	CCTGAAACAT	TTACAAATAA	TAGTTGTGGT	CCTCCAGCGC	TTATAATGGT	ACTGCATTCT	GTCGACCTCT	TTATCCGCTC
ACATTTCCCC	GGTATGGTGT	GGACTTTGTA	AATGTTTATT	ATCAACACCA	GGAGGTCGCG	AATATTACCA	TGACGTAAGA	CAGCTGGAGA	AATAGGCGAG
4210	4270	4330	4390	4450	4510	4570	4630	4690	4750
СТТТТТААТТ	TCATAATCAG	TCCCCCTGAA	CTTATAATGG	CACTGCATTC	GCTGGATGAT	TTATTGCAGC	CATTTTTTC	TCTGTATACC	TGTGAAATTG
GAAAAATTAA	AGTATTAGTC	AGGGGGACTT	GAATATTACC	GTGACGTAAG	CGACCTACTA	AATAACGTCG	GTAAAAAAG	AGACATATGG	ACACTTTAAC

4860	4920	4980	5040	5100	5160	5220	5280	5340	5400
TCACTGCCCG	CGCGCGGGGA	CTGCGCTCGG	TTATCCACAG	GCCAGGAACC	GAGCATCACA	TACCAGGCGT	ACCGGATACC	TGTAGGTATC	CCCGTTCAGC
AGTGACGGGC	GCGCGCCCT	GACGCGAGCC	AATAGGTGTC	CGGTCCTTGG	CTCGTAGTGT	ATGGTCCGCA	TGGCCTATGG	ACATCCATAG	GGGCAAGTCG
4850	4910	4970	5030	5090	5150	5210	5270	5330	5390
TGCGTTGCGC	AATCGGCCAA	CACTGACTCG	GGTAATACGG	CCAGCAAAAG	CCCCCCTGAC	ACTATAAAGA	CCTGCCGCTT	ATGCTCACGC	GCACGAACCC
ACGCAACGCG	TTAGCCGGTT	GTGACTGAGC	CCATTATGCC	GGTCGTTTTC	GGGGGGACTG	TGATATTTCT	GGACGCCGAA	TACGAGTGCG	CGTGCTTGGG
4840	4900	4960	5020	5080	5140	5200	5260	5320	5380
TCACATTAAT	TGCATTAATG	CTTCCTCGCT	ACTCAAAGGC	GAGCAAAAGG	ATAGGCTCCG	ACCCGACAGG	CTGTTCCGAC	CGCTTTCTCA	TGGGCTGTGT
AGTGTAATTA	ACGTAATTAC	GAAGGAGCGA	TGAGTTTCCG	CTCGTTTTCC	TATCCGAGGC	TGGGCTGTCC	GACAAGGCTG	GCGAAGAGT	ACCCGACACA
4830	4890	4950	5010	5070	5130	5190	5250	5310	5370
GTGAGCTAAC	TCGTGCCAGC	CGCTCTTCCG	GTATCAGCTC	AAGAACATGT	GCGTTTTTCC	AGGTGGCGAA	GTGCGCTCTC	GGAAGCGTGG	CGCTCCAAGC
CACTCGATTG	AGCACGGTCG	GCGAGAAGGC	CATAGTCGAG	TTCTTGTACA	CGCAAAAGG	TCCACCGCTT	CACGCGAGAG	CCTTCGCACC	GCGAGGTTCG
4820	4880	4940	5000	5060	5120	5180	5240	5300	5360
TGCCTAATGA	GGGAAACCTG	GCGTATTGGG	GCGGCGAGCG	TAACGCAGGA	CGCGTTGCTG	CTCAAGTCAG	AAGCTCCCTC	TCTCCCTTCG	GTAGGTCGTT
ACGGATTACT	CCCTTTGGAC	CGCATAACCC	CGCCGCTCGC	ATTGCGTCCT	GCGCAACGAC	GAGTTCAGTC	TTCGAGGGAG	AGAGGGAAGC	CATCCAGCAA
4810	4870	4930	4990	5050	5110	5170	5230	5290	5350
AAGCCTGGGG	CTTTCCAGTC	GAGGCGGTFT	TCGTTCGGCT	AATCAGGGGA	GTAAAAAGGC	AAAATCGACG	TTCCCCCTGG	TGTCCGCCTT	TCAGTTCGGT
TTCGGACCCC	GAAAGGTCAG	CTCCGCCAAA	AGCAAGCCGA	TTAGTCCCCT	CAT'TTTCCG	TTTTAGCTGC	AAGGGGGACC	ACAGGCGGAA	AGTCAAGCCA

# THULLE CETTE

## FIGURE 19J

5520	5580	5640	5700	5760	5820	5880	5940	6000
GTAGGCGGTG	GTATTTGGTA	TGATCCGGCA	ACGCGCAGAA	CAGTGGAACG	ACCTAGATCC	ACTTGGTCTG	TTTCGTTCAT	TTACCATCTG
CATCCGCCAC	CATAAACCAT	ACTAGGCCGT	TGCGCGTCTT	GTCACCTTGC	TGGATCTAGG	TGAACCAGAC	AAAGCAAGTA	AATGGTAGAC
5510	5570	5630	5690	5750	5810	5870	5930	5990
AGCGAGGTAT	TAGAAGGACA	TGGTAGCTCT	GCAGCAGATT	GTCTGACGCT	AAGGATCTTC	ATATGAGTAA	GATCTGTCTA	ACGGGAGGGC
TCGCTCCATA	ATCTTCCTGT	ACCATCGAGA	CGTCGTCTAA	CAGACTGCGA	TTCCTAGAAG	TATACTCATT	CTAGACAGAT	TGCCCTCCCG
5500	5560	5620	5680	5740	5800	5860	5920	5980
GGATTAGCAG	ACGCCTACAC	GAAAAAGAGT	TTGTTTGCAA	TTTCTACGGG	GATTATCAAA	TCTAAAGTAT	CTATCTCAGC	TAACTACGAT
CCTAATCGTC	TGCCGATGTG	CTTTTTCTCA	AACAAACGTT	AAAGATGCCC	CTAATAGTTT	AGATTTCATA	GATAGAGTCG	ATTGATGCTA
5490	5550	5610	5670	5730	5790	5850	5910	5970
ACTGGTAACA	TGGCCTAACT	GTTACCTTCG	GGTGGTTTTT	CCTTTGATCT	TTGGTCATGA	TTTAAAATCAA	AGTGAGGCAC	GTCGTGTAGA
TGACCATTGT	ACCGGATTGA	CAATGGAAGC	CCACCAAAA	GGAAACTAGA	AACCAGTACT	AAATTTAGTT	TCACTCCGTG	CAGCACATCT
5480	5540	5600	5660	5720	5780	5840	5900	5960
GGCAGCAGCC	CTTGAAGTGG	GCTGAAGCCA	CGCTGGTAGC	TCAAGAAGAT	TTAAGGGATT	AAAATGAÄGT	ATGCTTAATC	CTGACTCCCC
CCGTCGTCGG	GAACTTCACC	CGACTTCGGT	GCGACCATCG	AGTTCTTCTA	AATTCCCTAA	TTTTACTTCA	TACGAATTAG	GACTGAGGGG
5470	5530	5590	5650	5710	5770	5830	5890	5950
TATCGCCACT	CTACAGAGTT	TCTGCGCTCT	AACAAACCAC	AAAAAGGATC	AAAACTCACG	TTTTAAATTA	ACAGTTACCA	CCATAGTTGC
ATAGCGGTGA	GATGTCTCAA	AGACGCGAGA	TTGTTTGGTG	TTTTTCCTAG	TTTTGAGTGC	AAAATTTAAT	TGTCAATGGT	GGTATCAACG
	5480 5480 5500 6CAGCAGCA ACTGGTAACA GGATTAGCAG AGCGAGGTAT GTAGGCC CCGTCGTCGG TGACCATTGT CCTAATCGTC TCGCTCCATA CATCCGC	GGCAGCAGCC ACTGGTAACA GGATTAGCAG AGCGAGGTAT GTAGGCC CCGTCGTCGG TGACCATTGT CCTAATCGTC TCGCTCCATA CATCCGC  5540 5550 5560 5570 CTTGAAGTGG TGGCCTAACT ACGCCTACAC TAGAAGGACA GTATTTC GAACTTCACC ACCGGATTGA TGCCGATGTG ATCTTCCTGT CATAAAC	GGCAGCAGCC ACTGGTAACA GGATTAGCAG AGCGAGGTAT GTAGGCC CCGTCGTCGG TGACCATTGT CCTAATCGTC TCGCTCCATA CATCCGC CTTGAAGTGG TGGCCTAACT ACGCCTACAC TAGAAGGACA GTATTTC GAACTTCACC ACCGGATTGA TGCCGATGTG ATCTTCCTGT CATAAAC  S600 5610 5610 5620 5630 GCTGAAGCCA GTTACCTTCG GAAAAAGAGT TGGTAGCTCT TGATCCC CGACTTCGGT CAATGGAAGC CTTTTTTCTCA ACCATCGAGA ACTAGGC	GGCAGCAGC ACTGGTAACA GGATTAGCAG AGCGAGGTAT GTAGGCC CCGTCGTCGG TGACCATTGT CCTAATCGTC TCGCTCCATA CATCCGC GAACTTCACC ACCGGATTGA TGCCGATGTG ATCTTCCTGT CATAAAC GCTGAAGCCA ACCGGATTGA TGCCGATGTG ATCTTCCTGT CATAAAC GCTGAAGCCA GTTACCTTCG GAAAAAGAGT TGGTAGCTCT TGATCCC CGACTTCGGT CAATGGAAGC CTTTTTCTCA ACCATCGAGA ACTAGGC GCTGGTAGC GAAAAAGAGT TGGTAGCTCT TGATCCC CGACTTCGGT CAATGGAAGA TTGTTTGCAA GCAGCAGATT ACGCGCAGACTTCCGC CCACCAAAAA AACAAACGTT CGTCGTCTAA TGCGCGTGCGCACACATCG CCACCAAAAAA AACAAACGTT CGTCGTCTAA TGCGCGT	5480         5490         5500         5510           GGCAGCAGCC         ACTGGTAACA         GGATTAGCAG         AGCGAGGTAT         GTAGGCC           CCGTCGTCGG         TGACCATTGT         CCTAATCGTC         TCGCTCCATA         CATCGC           5540         5550         550         5570         GTATTTC           GAACTTCACC         ACCGGATTGA         TGCCGATGTC         ATCTTCCTGT         CATAAAA           GCTGAAGCCA         ACCGGATTTGA         TGCTAAAAC         ATCTTCCTGT         CATAAAAC           GCACTTCGGT         ACCGGATTTTCTCA         ACCATCGAGA         ACTAGGC           CGACTTCGGT         CTTTTTTCTCA         ACCATCGAGA         ACTAGGC           CGACTAACC         CTTTTTTCTCA         ACCATCGAGA         ACTAGGC           CGCTGGTAGC         CTTTTTTCTCA         ACCATCGAGAT         ACGCGCAGAGA           S660         S670         S680         S690         S690           CGCTGGTAGC         CCACCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	5480         5490         5510         5510           GGCAGCAGCC         ACTGGTAACA         GGATTAGCAG         AGCGAGGTAT         GTAGGCC           CCGTCGTCGG         TGACCATTGT         CCTAATCGTC         TCGCTCCATA         CATCCGC           5540         5550         5560         5570         CATCCGATTG         ACCGCTACAC         TAGAAGGACA         GTATTTC           GAACTTCACC         ACCGGATTGA         TGCCGATGTG         ATCTTCCTGT         CATAAAC           GCACTTCACC         ACCGGATTTG         TGCCGATGTG         ATCTTCCTGT         CATAAAC           GCACTTCACC         GCACTTCTTCT         ACCATCGAGA         ACTAAAC         CATAAAC           GCACTTCGGT         CATTTTTTCTCTC         ACCATCGAGA         ACCACCGAGATT         ACCACCGAGATT           560         560         560         560         560         560           CGCTGGTAGC         CTTTTTTCTCA         ACCACTCGAGATT         ACCACTCGAGATT         ACCACTCGAGATT           GCGACCAAAAA         AACAAACGTT         CGTCGTCTAA         TGCGCGAGATGAT           AGTTCTTCTA         AACGACTCTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	5480         5490         5500         5510           GGCAGCAGCC         ACTGGTAACA         GGATTAGCAG         AGCGAGGTAT         CATCCGCCC           5540         5550         5560         5570         CATCCGCC           5600         5610         5620         5630         GAATTTCCGC         CATCCGCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	5480         5490         5500         5510           GGCAGCAGCC         ACTGGTAACA         GGATTAGCAG         ACGCAGATT         CATCCCTC           CCGTCGTCGG         TGCTCCATA         CATCCCCC         CATCCCCC         CATCCCCC         CATCCCCCC         CATCCCCATA         CATCCCCCCC         CATCCCCTCC         CATCCCTCCC         ACCGCTAACT         ACCGCTACCC         ACCGCTACCC         ACCGCTACCC         ACCGCATCCC         ACCGCATCCC         ACCGCATCCC         ATCTTCCTCTC         CATACCTTCC         ACCGCATCCC         ACCGCATCCC         ACCGCATCCC         ACCGCATCCC         ACCGCATCCCC         ACCGCATCCCCCC         ACCGCATCCCCC         ACCGCATCCCCCC         ACCGCATCCCCCC         ACCGCATCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC

6060	6120	6180	6240	6300	6360	6420	6480	6540	6600
TTATCAGCAA	TCCGCCTCCA	AATAGTTTGC	GGTATGGCTT	TTGTGCAAAA	GCAGTGTTAT	GTAAGATGCT	CGGCGACCGA	ACTTTAAAAG	CCGCTGTTGA
AATAGTCGTT	AGGCGGAGGT	TTATCAAACG	CCATACCGAA	AACACGTTTT	CGTCACAATA	CATTCTACGA	GCCGCTGGCT	TGAAATTTTC	GGCGACAACT
6050	6110	6170	6230	6290	6350	6410	6470	6530	6590
GGCTCCAGAT	TGCAACTTTA	TTCGCCAGTT	CTCGTCGTTT	ATCCCCCATG	TAAGTTGGCC	CATGCCATCC	ATAGTGTATG	ACATAGCAGA	AAGGATCTTA
CCGAGGTCTA	ACGTTGAAAT	AAGCGGTCAA	GAGCAGCAAA	TAGGGGGTAC	ATTCAACCGG	GTACGGTAGG	TATCACATAC	TGTATCGTCT	TTCCTAGAAT
6040	6100	6160	6220	6280	6340	6400	6460	6520	6580
CACGCTCACC	GAAGTGGTCC	GAGTAAGTAG	TGGTGTCACG	GAGTTACATG	TTGTCAGAAG	CTCTTACTGT	CATTCTGAGA	ATACCGCGCC	GAAACTCTC
GTGCGAGTGG	CTTCACCAGG	CTCATTCATC	ACCACAGTGC	CTCAATGTAC	AACAGTCTTC	GAGAATGACA	GTAAGACTCT	TATGGCGCGG	CTTTTGAGAG
6030	6090	6150	6210	6270	6330	6390	6450	6510	6570
CCGCGAGACC	GCCGAGCGCA	CGGGAAGCTA	ACAGGCATCG	CGATCAAGGC	CCTCCGATCG	CTGCATAATT	TCAACCAAGT	ATACGGGATA	TCTTCGGGGC
GGCGCTCTGG	CGGCTCGCGT	GCCCTTCGAT	TGTCCGTAGC	GCTAGTTCCG	GGAGGCTAGC	GACGTATTAA	AGTTGGTTCA	TATGCCCTAT	AGAAGCCCCG
6020	6080	6140	6200	6260	6320	6380	6440	6500	6560
TGCAATGATA	AGCCGGAAGG	TAATTGTTGC	TGCCATTGCT	CGGTTCCCAA	CTCCTTCGGT	TATGGCAGCA	TGGTGAGTAC	CCCGGCGTCA	TGGAAAACGT
ACGTTACTAT	TCGGCCTTCC	ATTAACAACG	ACGGTAACGA	GCCAAGGGTT	GAGGAAGCCA	ATACCGTCGT	ACCACTCATG	GGGCCGCAGT	ACCTTTTGCA
6010	6070	6130	6190	6250	6310	6370	6430	6490	6550
GCCCCAGTGC	TAAACCAGCC	TCCAGTCTAT	GCAACGTTGT	CATTCAGCTC	AAGCGGTTAG	CACTCATGGT	TTTCTGTGAC	GTTGCTCTTG	TGCTCATCAT
CGGGGTCACG	ATTTGGTCGG	AGGTCAGATA	CGTTGCAACA	GTAAGTCGAG	TTCGCCAATC	GTGAGTACCA	AAAGACACTG	CAACGAGAAC	ACGAGTAGTA

6660	6720	6780	6840	6900	6960	7020	7080	7140	7200
TTTACTTTCA	GGAATAAGGG	AGCATTTATC	AAACAAATAG	GGAGATCTGC	TTAATTTTAT	GGTCGACTCT	CTTGTGTGTT	GCTTGACCGA	ATGTACGGGC
AAATGAAAGT	CCTTATTCCC	TCGTAAATAG	TTTGTTTATC	CCTCTAGACG	AATTAAAATA	CCAGCTGAGA	GAACACACAA	CGAACTGGCT	TACATGCCCG
6650	6710	6760 6770	6830	6890	6950	7010	7070	7130	7190
TTCAGCATCT	CGCAAAAAG	TCCTTTTTCA ATATTATTGA	TTAGAAAAAT	CGACGGATCG	ACCTTTTTT	GATCCCCTAT	CTGCTCCCTG	ACAAGGCAAG	CTGCTTCGCG
AAGTCGTAGA	GCGTTTTTTC	AGGAAAAGT TATAATAACT	AATCTTTTTA	GCTGCCTAGC	TGGAAAAAA	CTAGGGGATA	GACGAGGGAC	TGTTCCGTTC	GACGAAGCGC
6640	6700	6760	6820	6880	6940	7000	7060	7120	7180
CCAACTGATC	GGCAAAATGC	TCCTTTTTCA	TTGAATGTAT	CACCTGACGT	AGCCAGAGTA	CCGATCTCCC	AAGCCAGTAT	TTAAGCTACA	GCGTTTTGCG
GGTTGACTAG	CCGTTTTACG	AGGAAAAGT	AACTTACATA	GTGGACTGCA	TCGGTCTCAT	GGCTAGAGGG	TTCGGTCATA	AATTCGATGT	CGCAAAACGC
6630	6690	6750	6810	6870	6930	6990	7050	7110	7170
ACTCGTGCAC	AAAACAGGAA	CTCATACTCT	GGATACATAT	CGAAAAGTGC	GGCTTCGAAT	GAGTTTGGCG	CCGCATAGTT	CGAGCAAAAT	TTAGGGTTAG
TGAGCACGTG	TTTTGTCCTT	GAGTATGAGA	CCTATGTATA	GCTTTTCACG	CCGAAGCTTA	CTCAAACCGC	GGCGTATCAA	GCTCGTTTTA	AATCCCAATC
6620	6680	6740	6800	6860	6920	6980	7040	7100	7160
GATGTAACCC	TGGGTGAGCA	ATGTTGAATA	TCTCATGAGC	CACATTTCCC	GAGGCGCGCC	TTTTGAGATG	TGCTCTGATG	GAGTAGTGCG	AAGAATCTGC
CTACATTGGG	ACCCACTCGT	TACAACTTAT	AGAGTACTCG	GTGTAAAGGG	CTCCGCGCGG	AAAACTCŤAC	ACGAGACTAC	CTCATCACGC	TTCTTAGACG
6610	6670	6730	6790	6850	6910	6970	7030	7090	7150
GATCCAGTTC	CCAGCGTTTC	CGACACGGAA	AGGGTTATTG	GGGTTCCGCG	TAGGTGACCT	TTTATTTAT	CAGTACAATC	GGAGGTCGCT	CAATTGCATG
CTAGGTCAAG	GGTCGCAAAG	GCTGTGCCTT	TCCCAATAAC	CCCAAGGCGC	ATCCACTGGA	AAATAAAATA	GTCATGTTAG	CCTCCAGCGA	GTTAACGTAC

# DESCHEST ESCHEV

# pD17-hG1b

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7260	7320	7380	7440	7500	7560	7620	7680	7740	7800
TTACGGGGTC	ATGGCCCGCC	TTCCCATAGT	AAACTGCCCA	TCAATGACGG	CTACTTGGCA	AGTACATCAA	TTGACGTCAA	ACAACTCCGC	GCAGAGCTCT
AATGCCCCAG	TACCGGGCGG	AAGGGTATCA	TTTGACGGGT	AGTTACTGCC	GATGAACCGT	TCATGTAGTT	AACTGCAGTT	TGTTGAGGCG	CGTCTCGAGA
7250	7310	7370	7430	7490	7550	7610	7670	7730	7790
TAGTAATCAA	CTTACGGTAA	ATGACGTATG	TATTTACGGT	CCTATTGACG	TGGGACTTTC	CGGTTTTGGC	CTCCACCCCA	AAATGTCGTA	GTCTATATAA
A1'CATTAGTT	GAATGCCATT	TACTGCATAC	ATAAATGCCA	GGATAACTGC	ACCCTGAAAG	GCCAAAACCG	GAGGTGGGGT	TTTACAGCAT	CAGATATATT
7240	7300	7360	7420	7480	7540	7600	7660	7720	7780
TAGTTATTAA	CGTTACATAA	GACGTCAATA	ATGGGTGGAC	AAGTACGCCC	CATGACCTTA	CATGGTGATG	ATTTCCAAGT	GGACTTTCCA	ACGGTGGGAG
ATCAATAATT	GCAATGTATT	CTGCAGTTAT	TACCCACCTG	TTCATGCGGG	GTACTGGAAT	GTACCACTAC	TAAAGGTTCA	CCTGAAAGGT	TGCCACCCTC
7230	7290	7350	7410	7470	7530	7590	7650	7710	7770
GATTATTGAC	TGGAGTTCCG	CCCGCCCATT	ATTGACGTCA	ATCATATGCC	ATGCCCAGTA	TCGCTATTAC	ACTCACGGGG	AAAATCAACG	GTAGGCGTGT
CTAATAACTG	ACCTCAAGGC	GGGCGGGTAA	TAACTGCAGT	TAGTATACGG	TACGGGTCAT	AGCGATAATG	TGAGTGCCCC	TTTTAGTTGC	CATCCGCACA
7220	7280	7340	7400	7460	7520	7580	7640	7700	7760
CGTTGACATT	AGCCCATATA	CCCAACGACC	GGGACTTTCC	CATCAAGTGT	GCCTGGCATT	GTATTAGTCA	TAGCGGTTTG	TTTTGGCACC	CAAATGGGCG
GCAACTGTAA	TCGGGTATAT	GGGTTGCTGG	CCCTGAAAGG	GTAGTTCACA	CGGACCGTAA	CATAATCAGT	ATCGCCAAAC	AAAACCGTGG	GTTTACCCGC
7210	7270	7330	7390	7450	7510	7570	7630	7690	7750
CAGATATACG	ATTAGTTCAT	TGGCTGACCG	AACGCCAATA	CTTGGCAGTA	TAAATGGCCC	GTACATCTAC	TGGGCGTGGA	TGGGAGTTTG	CCCATTGACG
GTCTATATGC	TAATCAAGTA	ACCGACTGGC	TTGCGGTTAT	GAACCGTCAT	ATTTACCGGG	CATGTAGATG	ACCCGCACCT	ACCCTCAAAC	GGGTAACTGC

FIGURE 19M

# CEPCEL SCHEOLES

FIGURE 19N

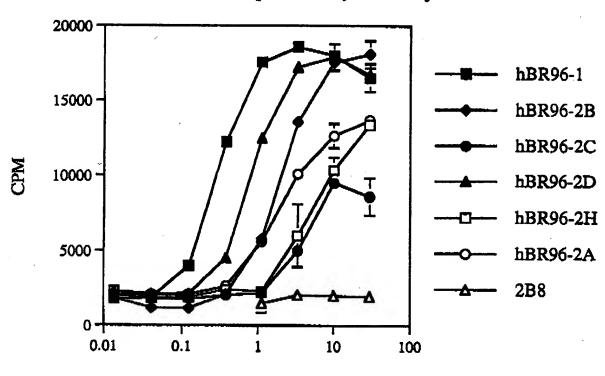
pD17-hG1b

7810 7850 7860 CTGGCTAACT AGAGAACCCA CTGCTTACTG GCTTATCGAA ATTAATACGA CTCACTATAG GACCGATTGA TCTCTTGGGT GACGAATGAC CGAATAGCTT TAATTATGCT GAGTGATATC

7880 7870

GGAGACCCAA GCTT CCTCTGGGTT CGAA

#### Complement Dependent Cytotoxicity



Concentration IgG (µg/ml)

### Antibody Dependent Cell-Mediated Cytotoxicity

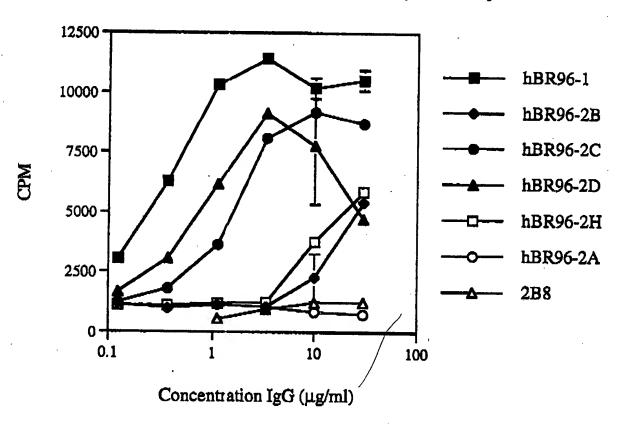
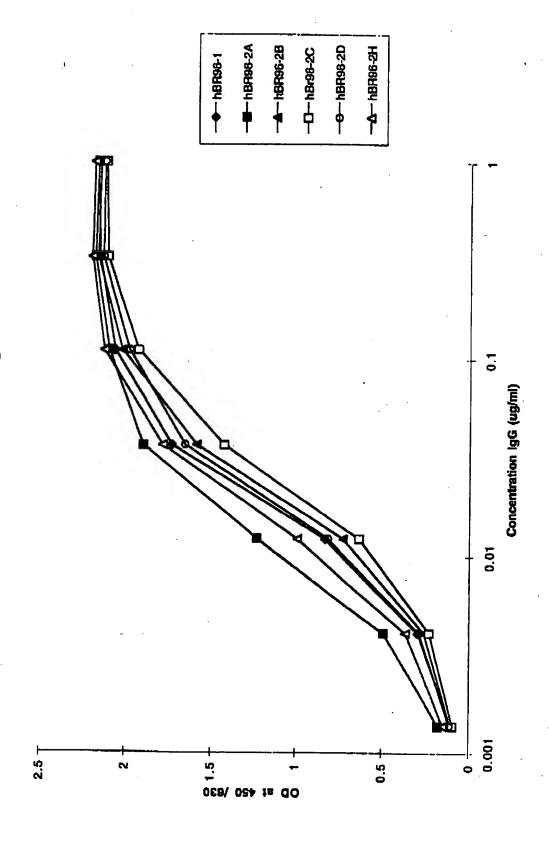
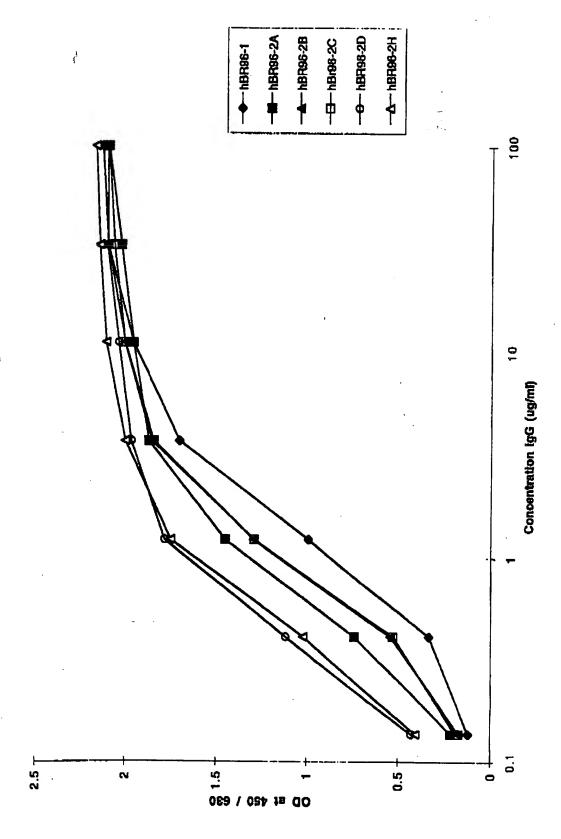


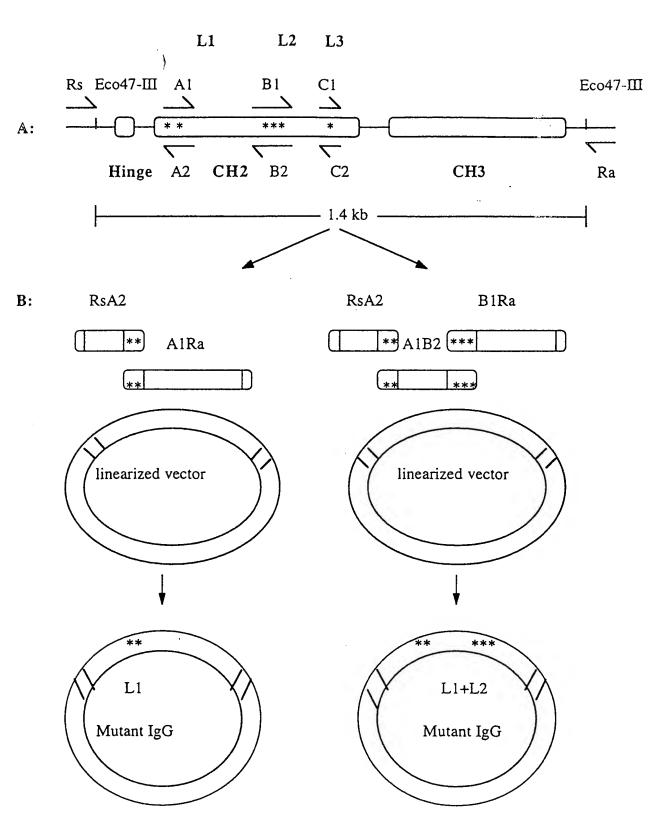
FIGURE 22

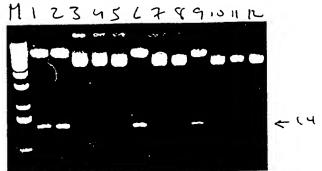
Binding activity of hBR96-2 constant region mutants on LeY-HSA



Binding activity of hBR96-2 constant region mutants on LNFPIII-BSA







#### hBR96-2 Heavy Chain Variable Region (VH)

EVQLVESGGG LVQPGGSLRL SCAASGFPFS DYYMYWVRQA PGKGLEWVSY

51 61 71 81 91
ISQDGDITDY ADSVKGRFTI SRDNAKNSLY LQMINSLRDED TAVYYCARGL

101 111
ADGAWFAYWG QGTLVTVSS

#### human IgGI constant

YFPEPVTVSW NSGALTSGVH TFPAVLQSSG LYSLSSVVTV PSSSLGTQTY

ICNVNHKPSN TKVDKKVEPK SCDKTHTCPP CHAPELDGGP SVFLFPPKPK

DTLMISRTPE VTCVVVDVSH EDPEVKFNWY VDGVEVHNAK TKPREEQYNS

3.00 3.11

TYRVVSVLTV LHQDWLNGKED YKOKVSNKAL PAPLEKTISK AKGQPREPQV

YTLPPSRDEL TKNQVSLTCL VKGFYPSDIA VEWESNGQPE NNYKTTPPVL

DSDGSFFLYS KLTVDKSRWQ QGNVFSCSVM HEALHNHYTQ KSLSLSPGK

#### hBR96-2A: Heavy Chain Variable Region (VH)

1 21 31 41
EVQLVESGGG LVQPGGSLRL SCAASGFPFS DYYMYWVRQA PGKGLEWVSY

51 61 71 81 91
ISQDGDITDY ADSVKGRFTI SRDNAKNSLY LQMNSLRDED TAVYYCARGL

101 111
"ADGAWFAYWG QGTLVTVSS

#### hBR96-2A: Human Heavy Chain IgG1 Constant Region ACH2

A STKGPSVFPL APSSKSTSGG TAALGCLVKD YFPEPVTVSW NSGALTSGVH

TFPAVLQSSG LYSLSSVVTV PSSSLGTQTY ICNVNHKPSN TKVDKKVEPK

SCDKTHTCPP CP GQPREPQV YTLPPSRDEL TKNQVSLTCL VKGFYPSDIA

VEWESNGQPE NNYKTTPPVL DSDGSFFLYS KLTVDKSRWQ QGNVFSCSVM

HEALHNHYTG KSLSLSPGK

#### This sequence is the chi BR96 IgG1 with CH2 deleted.

	VA				
1	VH EVNLVESGGG	LVQPGGSLKV	SCVTSGFTFS	DYYMYWVRQT	PEKRLEWVAY
51	ISQGGDITDY	PDTVKGRFTI	SRDNAKNTLY	LQMSRLKSED	TAMYYCARGL
101	DDGAWFAYWG	QGTLVTVSVA	STRGPSVFPL	APSSKSTSGG	TAALGCLVKI
	YFPEPVTVSW		_		•
201	ICNVNHKPSN	TKVDKKVEPK	SCDKTHTCPP	CHGQPREPQV	YTLPPSRDEL
251	TKNQVSLTCL	VKGFYPSDIA	VEWESNGOPE	NNYKTTPPVL	DSDGSFFLYS
301	KLTVDKSRWO	OCNVESCSVM	HEALHNHYTO	KSLSLSPGK	